TOSHIBA
Leading Innovation >>>

USER MANUAL

L7300A Digital Series

Contents

During the life of your TV firmware updates will be made available to ensure that your TV maintains optimum performance:

If your TV is connected to the internet, firmware will be automatically made available.
If your TV is not connected to the internet, you can download the latest version of firmware from
www.mytoshiba.com.au/support

Pedestal stand Assembling

CAUTION: Before beginning pedestal assembly, carefully lay the front of the LCD Panel face down on a flat, cushioned surface such as a quilt or blanket. Leave the bottom of the unit protruding over the edge of the surface and assemble as indicated.

NOTE: Extreme care should always be used when attaching the pedestal stand to avoid damage to the LCD panel.

4
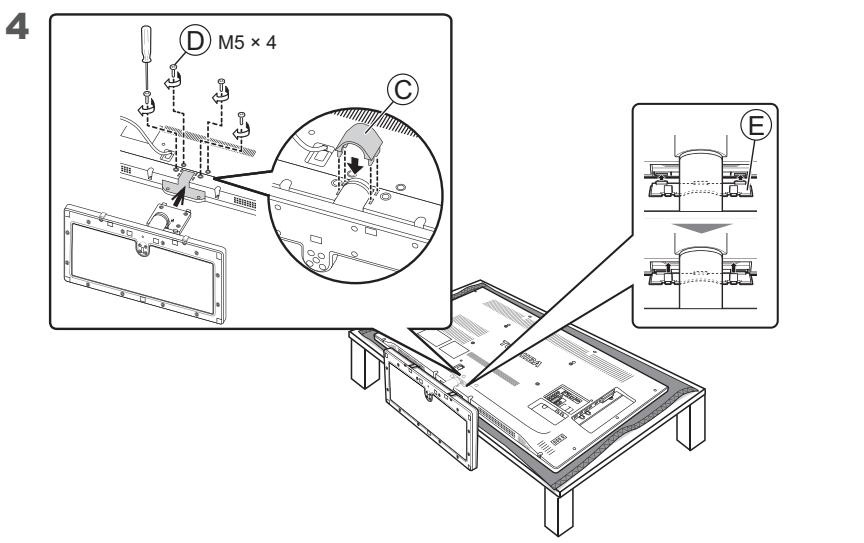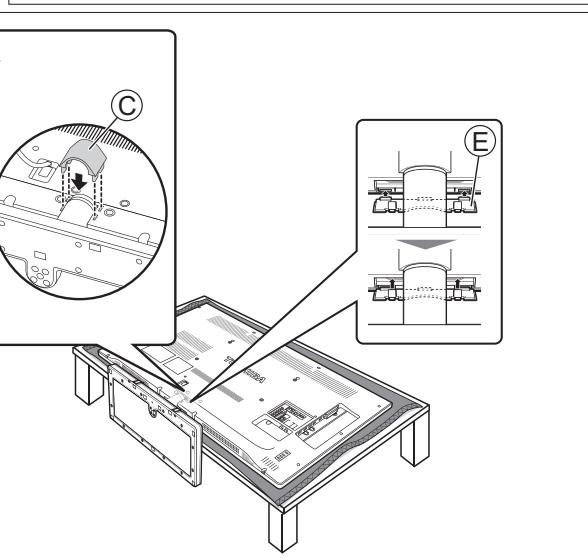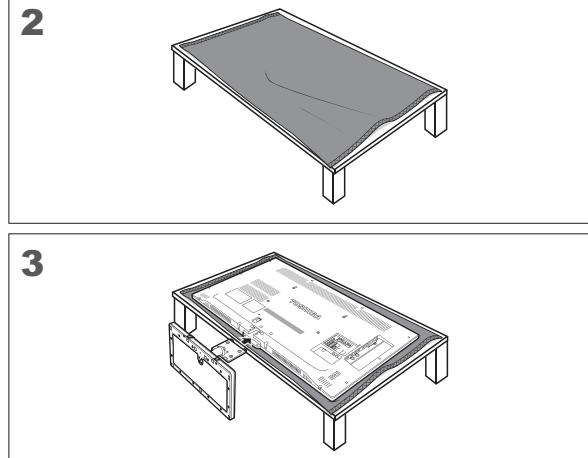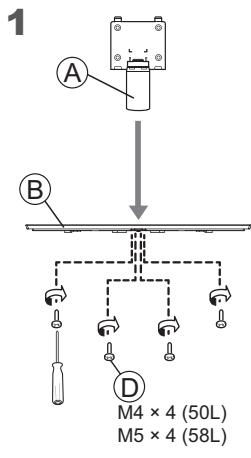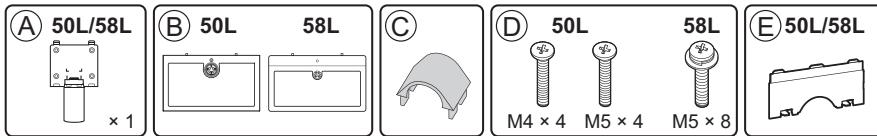
Safety Precautions

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken to obtain the best results and for safety to be assured. Please read the points below for your own safety. They are of a general nature, intended to help with all electronic consumer products, and some points may not apply to the goods you have just purchased.

Air Circulation

Leave more than 10 cm clearance around the television to allow adequate ventilation. This will prevent overheating and possible damage to the television. Dusty places should also be avoided. For wall mounted positions at least 2.5 cm gap was retained from the wall and the 10 cm was kept clear around all edges of the TV.

Heat Damage

Damage may occur if the television is left in direct sunlight or near a heater. Avoid places subject to extremely high temperatures or humidity. Place in a location where the temperature remains between 5 °C min. and 35 °C max.

Mains Supply

The mains supply required for this equipment is 220-240 V AC 50 Hz. Never connect to a DC supply or any other power source. DO ensure that the television is not standing on the mains lead.
DO NOT cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance.
IF IN DOUBT, PLEASE CONSULT A COMPETENT ELECTRICIAN.

Do

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and inter-connections between pieces of equipment) are properly made and in accordance with the manufacturers' instructions. Switch off and withdraw the mains plug before making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

WARNING: To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions. See page 6.

DO be careful with glass panels or stands on equipment.

DO use a soft, dry cloth to clean the unit.

DO NOT REMOVE ANY FIXED COVERS AS THIS WILL EXPOSE DANGEROUS AND 'LIVE' PARTS.

THE MAINS PLUG IS USED AS THE DISCONNECTING DEVICE AND THEREFORE SHOULD BE READILY OPERABLE.

Do not

DO NOT obstruct the ventilation openings of the equipment with items such as newspapers, tablecloths, curtains, etc. Overheating will cause damage and shorten the life of the equipment.

DO NOT allow electrical equipment to be exposed to dripping or splashing or objects filled with liquids, such as vases, to be placed on the equipment.

DO NOT place hot objects or naked flame sources, such as lighted candles or nightlights on, or close to equipment. High temperatures can melt plastic and lead to fires.

WARNING: To prevent the spread of fire, keep candles or other open flames away from this product at all times.

DO NOT use makeshift stands and NEVER fix legs with wood screws.

DO NOT leave equipment switched on when it is unattended, unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off by withdrawing the plug, and make sure your family knows how to do this. Special arrangements may need to be made for people with disabilities.

DO NOT continue to operate the equipment if you are in any doubt about it working normally, or it is damaged in any way – switch off, withdraw the mains plug and consult your dealer.

DO NOT push/pull CI CAM at a tilt to prevent breakdown of COMMON INTERFACE.

WARNING: Excessive sound pressure from earphones or headphones can cause hearing loss.

ABOVE ALL - NEVER let anyone, especially children, push or hit the screen and cabinet back, or push anything into holes, slots or any other openings in the case. These actions will damage screen or internal parts.

NEVER guess or take chances with electrical equipment of any kind - it is better to be safe than sorry.

Installation and important information

Where to install

Locate the television away from direct sunlight and strong lights. Soft, indirect lighting is recommended for comfortable viewing. Use curtains or blinds to prevent direct sunlight falling on the screen.

Always Place the TV on the floor or a sturdy, level, stable surface that can support the weight of the unit.

Sturdy tie (as short as possible)

Hook
Base plate backside hook
Screw (supplied)

Hook

Side View

Top View

9 mm
20 mm
4 mm

Stand style is dependent on model

To secure the TV, use a sturdy strap from the base plate backside hook to a wall stud, pillar, or other firm immovable structure. Make sure the strap is tight, secure, and parallel to the floor.

The LCD display panels are manufactured using an extremely high level of precision technology; however, sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

Make sure the television is located in a position where it cannot be pushed or hit by objects, as pressure will break or damage the screen. Also, please be certain that small items cannot be inserted into slots or openings in the case.

⚠ Avoid using chemicals (such as air refreshers, cleaning agents, etc.) on or near the TV pedestal. Studies indicate that plastics may weaken and crack over time from the combination effects of chemical agents and mechanical stress (such as weight of TV). Failure to follow these instructions could result in serious injury and/or permanent damage to TV and TV pedestal.

When using a Wall Bracket

Use a wall bracket appropriate for the size and weight of the LCD TV.

• Two people are required for installation.

• Install a wall-mount from another manufacturer.

1 Unplug and remove any cables and/or other component connectors from the rear of the TV.

2 Carefully lay the front of the unit face down on a flat, cushioned surface such as a quilt or blanket.

3 Follow the instructions provided with your wall bracket. Before proceeding, make sure the appropriate bracket (s) are attached to the wall and the back of the TV as described in the instructions provided with the wall bracket.

4 Always use the screws supplied or recommended by the wall mount manufacturer.

Removing the Pedestal Stand:

1 Carefully lay the front of the unit face down on a flat, cushioned surface such as a quilt or blanket. Leave the stand protruding over the edge of the surface.

   NOTE: Extreme care should always be used when removing the pedestal stand to avoid damage to the LCD panel.

2 Remove the cover and screws.
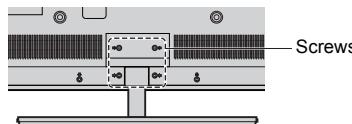
Screws

3 Once you have removed all screws holding the pedestal stand in place, remove the pedestal stand from the TV by sliding the pedestal stand away from the TV.

When using MHL (Mobile High-definition Link)

• Interoperability with MHL devices of other manufacturers is not guaranteed.

• Toshiba does not provide any guarantee, therefore, against operational failure such as that described below when an MHL source is connected to the TV.

- No picture or sound

- Some of the functions do not work by remote operation from the TV

• If the MHL does not work properly, also contact the manufacturer of the source device for advice on its use.

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Please take note

If stationary images generated by 4:3 broadcasts, text services, channel identification logos, computer displays, video games, on-screen menus, etc. are left on the television screen for any length of time, they could become conspicuous. It is always advisable to reduce both the brightness and contrast settings.

Very long, continuous use of the 4:3 picture on a 16:9 screen may result in some retention of the image at the 4:3 outlines. This is not a defect of the LCD TV and is not covered under the manufacturer's warranty. Regular use of other size modes (e.g. Super Live) will prevent permanent retention.

EXCLUSION CLAUSE

Toshiba shall under no circumstances be liable for loss and/or damage to the product caused by:

i)   Fire;
ii) Earthquake;
iii) Accidental damage;
iv) Intentional misuse of the product;
v)   Use of the product in improper conditions;
vi) Loss and/or damage caused to the product whilst in the possession of a third party;
vii) Any damage or loss caused as a result of the owner's failure and/or neglect to follow the instructions set out in the owner's manual;
viii)Any loss or damage caused directly as a result of misuse or malfunction of the product when used simultaneously with associated equipment;

Furthermore, under no circumstances shall Toshiba be liable for any consequential loss and/or damage including but not limited to the following: loss of profit, interruption of business, the loss of recorded data whether caused during normal operation or misuse of the product.

When Using a USB Hard Drive (HDD)

• **The recording function has been designed for private use and entertainment in your home environment. Please note that any commercial use of the recording function could lead to copyright infringement of authors' rights. Toshiba asks you to respect the intellectual property rights of third parties.**

• **Before recording to a device connected to the TV, make a test recording and check the recording performance.**

• **Programmes that are prohibited from copying due to copyright protection cannot be recorded.**

• **Toshiba shall not be liable for compensation or incidental damages of any kind whatsoever resulting from content that was not properly recorded on the recording device or that was modified or lost.**

• **Toshiba shall not be liable for damages of any kind whatsoever (breakdown of the recording device, modification or loss of the recorded content, etc.) resulting from malfunction, operating failure or incorrect operation due to combining with another connected device.**

• **If you connect a USB HDD that has been used with a PC or another TV, only programmes which are recorded using this TV can be playback.**

• **Switch the TV to standby before you disconnect the USB HDD.**

  Not doing so may result in loss of the recorded data or malfunction of the USB HDD.

• **Please note that recording on the USB HDD is no longer playable after the TV's main-board is exchanged during service.**

The remote control

Simple at-a-glance reference of your remote control.
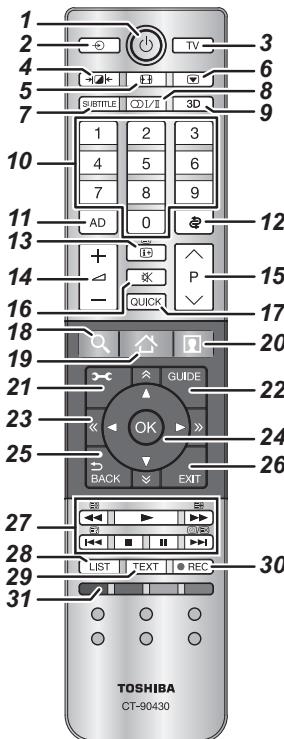
1 For On/Standby mode
2 To select external input sources
3 To select TV Mode
4 Selectable Picture
5 Widescreen viewing
6 Picture still
7 Digital Subtitles or Analogue TEXT Subtitle pages if available
8 ◁I/II Stereo/bilingual transmissions
9 To switch between 2D / 3D modes
10 Number buttons
11 Switch the Audio Description On/Off
12 To return to previous channel
13 To display on-screen information
  To access the index page in Text mode
14 To alter the TV volume
15 To change programme positions
  To change TEXT pages
16 To mute the TV sound
17 To access Quick Menu
18 🔍 **- Accesses the Search Portal**

19 ⌂ **- Accesses the CLOUD HOME**
20 🔲 **- Access to premium content available online**
21 To access the on-screen Menu
22 To display the digital on-screen Programme Guide
23 ⌃⌄《》 To page up, down, left or right
24 When using menus, the arrows move the cursor on the screen up, down, left or right. Press **OK** to confirm your selection
25 To return to previous Menu
26 To exit menus and applications
27 **When in TV mode:**
  ◯/☒ Analogue time display

  When in Text mode:
  ☰? To reveal concealed text
  ☰☒ To hold a wanted page
  ☰☰ To enlarge text display size
  ◯/☒ To erase Text pages temporarily when you are viewing in teletext mode.

  During Playback:
  ▶ To PLAY
  ■ To STOP
  II To PAUSE
  ◄◄ To SKIP-BACK
  ◄◄ To REWIND
  ▶▶ To FAST FORWARD
  ▶▶I To SKIP FORWARD

28 To access the analogue or digital Channel List
29 To call up text services
30 To record DTV programmes
31 Colour buttons: Text and interactive service control buttons

Inserting batteries and effective range
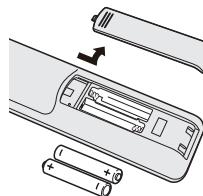
Remove the back cover to reveal the battery compartment and make sure the batteries are inserted the proper way. Suitable battery types for this remote control are AAA, IEC R03 1.5 V.

Do not combine a used, old battery with a new one or mix battery types. Remove exhausted batteries immediately to prevent acid from leaking into the battery compartment. Dispose of them in accordance with instructions on page 98 of this manual.

Warning: Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

The performance of the remote control will deteriorate beyond a distance of five metres or outside an angle of 30 degrees from the centre of the television. If the operating range becomes reduced, the batteries may need replacing.

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Connecting external equipment

Before connecting any external equipment, turn off all main power switches. If there is no switch, remove the mains plug from the wall socket.

Not used for this TV.

Headphones

HDMI (1~3)

USB (1~2)

Power cord

LAN port

COMPONENT VIDEO/AUDIO INPUT
VIDEO/AUDIO INPUT (Y/L/R) (EXT 2)

SCART (EXT 1)

HDMI 4 INPUT

DIGITAL AUDIO OUTPUT (OPTICAL)

RGB/PC INPUT

Aerial

Aerial Cable

OUT or IN/OUT

Scart/RCA adaptor
(supplied)
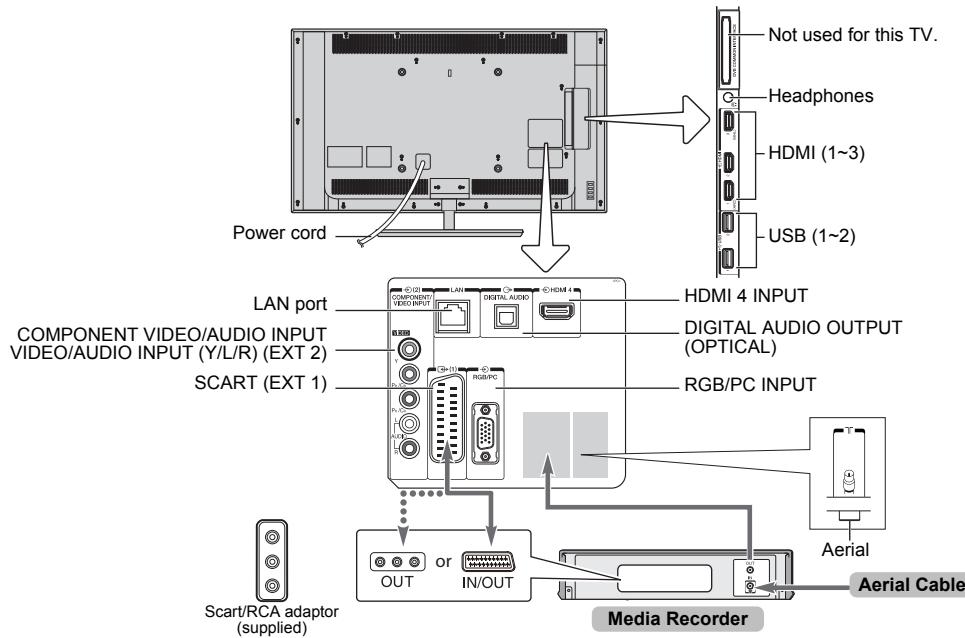
Media Recorder

Aerial cables: . . . .

Connect the aerial to the socket on the rear of the TV. If you use a decoder and/or a media recorder, it is essential that the aerial cable is connected through the decoder and/or through the media recorder to the TV.

SCART leads: . . . .

Connect the media recorder **IN**/**OUT** socket to the television.
Connect the decoder **TV** socket to the television.

Before running **Auto Tuning**, put your decoder and media recorder to **Standby**.

The RCA sockets alongside the **COMPONENT VIDEO INPUT** sockets will accept L and R audio signals.

When connecting the VIDEO/AUDIO devices, connect those cables to **Y/L/R** sockets.

The Digital Audio Output socket enables the connection of a suitable surround sound system.

NOTE: This output is always active.

HDMI® (High-Definition Multimedia Interface) is for use with electrical equipment with digital audio and video output. It is designed for best performance with 1080i and 1080p high-definition video signals but will also accept and display VGA, 480i, 480p, 576i, 576p and 720p signals.

PC format signals will also be displayed.

NOTE: Although this television is able to connect to HDMI equipment, it is possible that some equipment may not operate correctly.

LAN port is used to connect the TV to your home network.

A wide variety of external equipment can be connected to the back of the television; therefore, the relevant owner's manuals for *all* **additional equipment must be referred to for exact instructions.**

If the television automatically switches over to monitor external equipment, return to normal television by pressing the desired programme position button. To recall external equipment, press ⊕ to select between **TV**, **EXT 1**, **EXT 2**, **HDMI 1**, **HDMI 2**, **HDMI 3**, **HDMI 4** or **PC**.

When the external input mode is selected while viewing DTV mode, the SCART socket does not output video/audio signals.

Connecting an HDMI® device

The HDMI input on your television receives digital audio and uncompressed digital video from an HDMI source device.

This input is designed to accept HDCP (High-Bandwidth Digital Content Protection) programme material in digital form from EIA/CEA-861-D–compliant consumer electronic devices (such as a set-top box or DVD player with HDMI output). For acceptable video signal formats, see page 89.

NOTE: Supported Audio format: Linear PCM, Dolby Digital (AC-3), sampling rate 32/44.1/48 kHz.

To connect an HDMI device

Connect an HDMI cable (type A connector) to the HDMI terminal.

For proper operation, it is recommended that you use an HDMI cable with the HDMI Logo (HDMI).

- If your HDMI connection is capable of 1080p and/or your television is capable of refresh rates greater than 50 Hz, you will need a Category 2 cable. Conventional HDMI/DVI cable may not work properly with this model.
- HDMI cable transfers both video and audio. Separate analogue audio cables are not required (see illustration).

the back and side of your television

HDMI device

HDMI cable
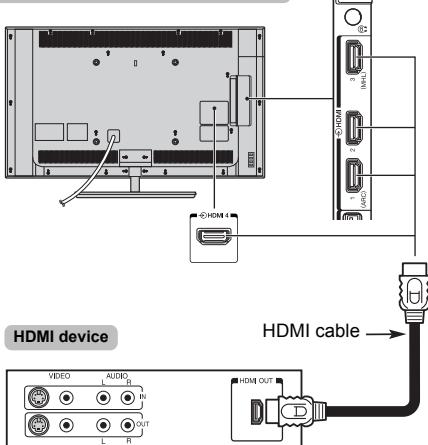
To view the HDMI device video, press ⊕ to select HDMI 1, HDMI 2, HDMI 3 or HDMI 4 mode.

HDMI's ARC (Audio Return Channel) feature

This feature enables the audio signal of the TV to be sent to the AV amplifier via the HDMI cable. It will not be necessary to connect a cable from the audio output of the TV to the audio input of the AV amplifier to reproduce the audio received from the tuner of the TV through the AV amplifier.

the side of your television

HDMI cable

AV amplifier that supports ARC

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Connecting an HDMI CEC Control compatible device

You can control the basic functions of connected audio/video devices using the television's remote control if you connect an HDMI CEC compatible AV amplifier or playback device. For an explanation of setup and operations, see pages 80–82.
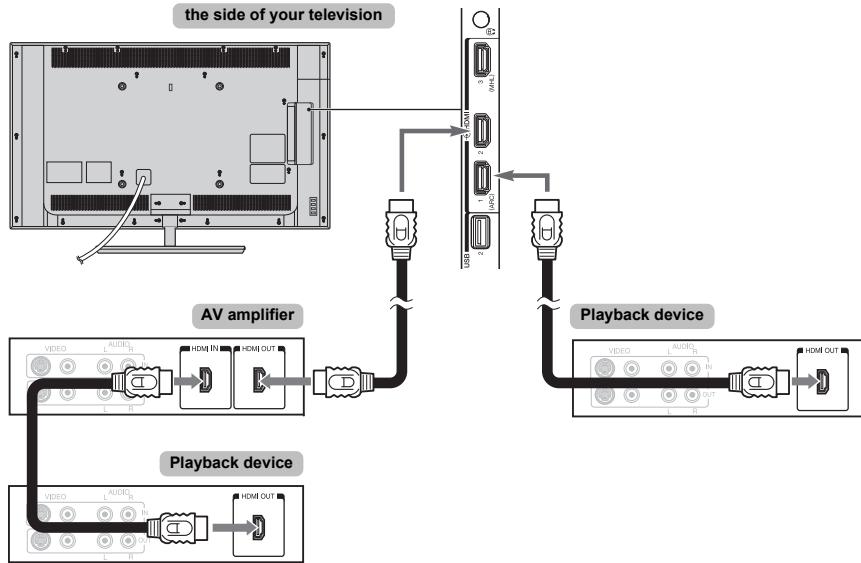
For the setup shown above, you will need three HDMI cables.

NOTE:
- If several devices are connected, the HDMI CEC Control feature may not operate properly.
- For proper operation, it is recommended that you use HDMI cables with the HDMI Logo (**HDMI**).
- This function is available when one PC and one AV amplifier are connected separately. However, it may not operate properly if the PC is connected via the AV amplifier.

Before controlling the device(s):
- After completing the above connections, set the HDMI CEC Control Setup menu as you desire (see page 80).
- The connected devices must also be set. For details, see the operation manual for each device.
- The HDMI CEC Control feature uses CEC technology as regulated by the HDMI standard.
- This feature is limited to models incorporating Toshiba's HDMI CEC Control. However, Toshiba is not liable for those operations. Refer to individual instruction manuals for compatibility information.

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Connecting a computer

With either an HDMI or an RGB/PC connection, you can watch your computer's display on the television.

To connect a PC to the HDMI terminal

When connecting a PC to the HDMI terminal on the television, use an HDMI cable (type A connector).

the side of your television

Computer

HDMI cable
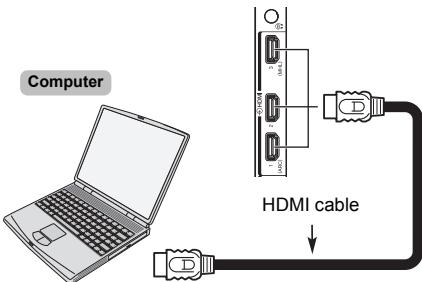
If connecting a PC with DVI terminal, use an HDMI-to-DVI adaptor cable.

the side of your television

Computer

HDMI-to-DVI adaptor cable
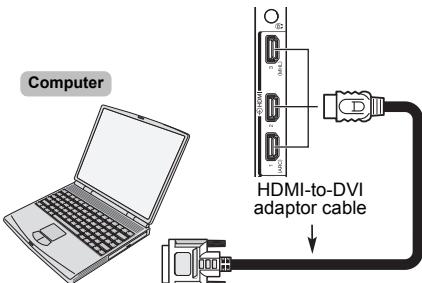
For acceptable PC and video signal formats, see page 89.

NOTE:
• The edges of the images may be hidden.
• If connecting a certain PC model with a unique PC signal, the PC signal may not be detected correctly.

To connect a PC to the RGB/PC terminal

When connecting a PC to the RGB/PC terminal on the television, use an analogue RGB (15-pin) computer cable.

the back of your television

Computer

RGB/PC

Mini D-sub 15 pin connector

RGB PC cable (not supplied)

Conversion adaptor if required (not supplied)
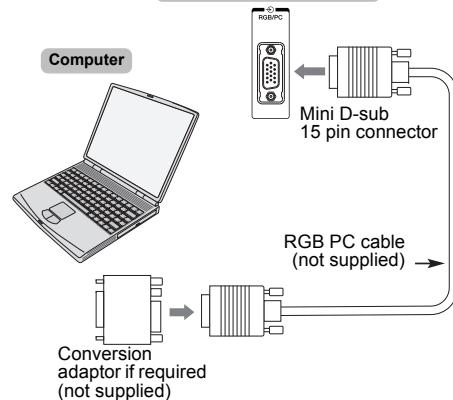
To use a PC, set the monitor output resolution on the PC before connecting it to the television. For acceptable PC signal formats, see page 88.

To display the optimum picture, use the PC setting feature (see page 77).

NOTE:
• Some PC models cannot be connected to this television.
• An adaptor is not needed for computers with a compatible mini D-sub15-pin terminal.
• Depending on the DVD's title and the specifications of the PC on which you are playing the DVD-Video, some scenes may be skipped or you may not be able to pause during multi-angle scenes.
• A band may appear at the edges of the screen or parts of the picture may be obscured. This is due to scaling of the picture by the set, it is not a malfunction.
• When PC input mode is selected, some of the television's features will be unavailable e.g. **Colour System** in the **Options** menu.
• Some PC models may output unique signals that the television may be unable to detect (see page 88).
• If connecting a certain PC model with a unique PC signal, the PC signal may not be detected correctly.

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Connecting a home network

The LAN port allows your Toshiba TV to connect to your home network. You can use this revolutionary home entertainment networking system to access photo, video and audio files that are stored on a media server and play/display them on your TV.

NOTE:
• If you connect to a shared network outside your home, it is advisable to use a router. Always use network media products in private network environments. Connect this TV to the same router as other network media products (server).
• If you use a hub or switch to connect the TV to your home network, you may not be able to use the automatic setup and will have to manually set up the network address. See page 44.
• If you use a router with built-in DHCP functionality, use the automatic setup. Manual setup may not work.
• If you connect the TV and PC directly, use a crossover LAN cable.
• Please consult your PC manufacturer about details of PC settings.
• Wireless appliances may interfere with Intel® Wireless Display.

To connect the TV to a home network - Wired

the back of your television

Modem (if available) Router with Hub

[1] [2]

Cable or Phone jack

Server PC

[2] [3]

[2]
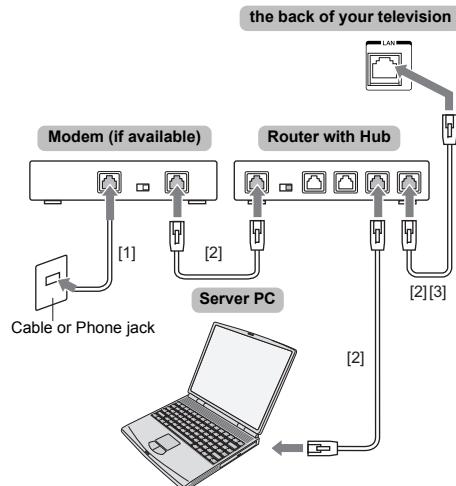
[1] Coaxial or telephone cable (depending on your modem type)

[2] Standard LAN cable

[3] Do not connect a phone jack directly to the TV's LAN port.

Warning: This TV complies with the EMC directive only when you use a shielded Cat5 ethernet cable.

To connect the TV to a home network with an internet connection - Wireless

Please refer to "Wireless Setup" section on page 41.

Access point (AP)

Wireless LAN router

Modem

Computer
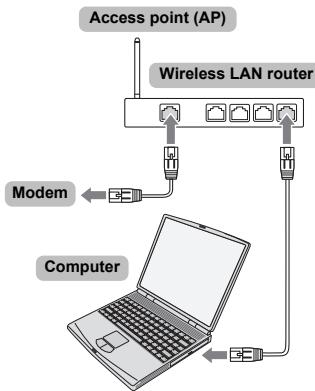
NOTE:
• If this device is going to be operated in the frequency range of 5.15 GHz to 5.35 GHz, it is restricted to indoor use.
• Make the wireless LAN appropriate security setting at the time of wireless LAN use to prevent the illegal use, spoofing and interception of communications.
• Don't connect wireless LAN to an outside network directly.
Apply the wireless LAN access point with router function or broadband router. Make the router appropriate security setting to prevent the illegal use.
Refer to the manual of router for a security setting.

To connect the TV to the PC with Intel® Wireless Display

PC with Intel® Wireless Display

Intel® WiDi

13
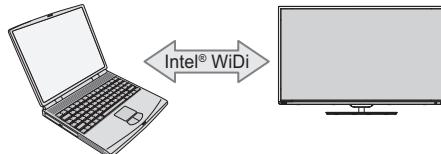
Controls and input connections

A wide variety of external equipment can be connected to the input sockets on the side of the television.
While all the necessary adjustments and controls for the television are made using the remote control, the buttons on the television may be used for some functions.

USB ports

Media Player/USB HDD connection port

Control panel

Light sensor

Remote sensor

Power LED
On = Green
Standby = Red
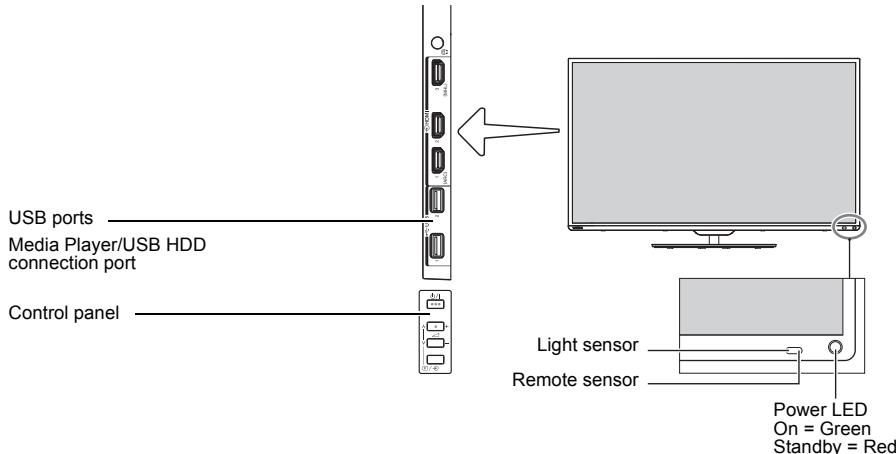
Switching on

If the RED LED is not lit, check that the mains plug is connected to the power supply and press ⏻ on the remote control; it may take a few moments. The GREEN LED will be lit.

To put the television into Standby, press ⏻ on the remote control. To view the television, press ⏻ again. The picture may take a few seconds to appear.

For energy saving:

We recommend that you use the television with the factory settings. The factory settings are for energy saving.
Unplugging the mains plug will cut energy use to zero for all televisions. This is recommended when the television is not being used for a long time, e.g. when on holiday.
Reducing the brightness of the screen will reduce energy use.
Energy efficiency cuts energy consumption and can save money.

NOTE: Putting the television into Standby will reduce energy consumption, but will still draw some power.

Using the TV controls and connections

• To turn on or off the TV, press ⏻/l.

• To alter the volume, press **+** or **–**.
  + and **–** buttons operate as volume up/down as default.

• Press Ⓟ / ⊕ repeatedly to switch the function of ◿ **+/– button as below.
  Volume→Channel→Input→Volume

The Media Player feature provides access to photo, movie and music files stored on a USB storage device that is connected via the USB 1 or USB 2 port or on a network device.

Please always refer to the owner's manual of the equipment to be connected for full details.

NOTE:
• The USB socket has limited functionality and Toshiba can take no responsibility for damage to other connected equipment.

• Interactive video games that involve shooting a "gun" at an on-screen target may not work with this TV.

Using the menu system

Press ✂━ on the remote control to display the menu.

The menu appears as a list of eight topics. As each icon is selected by pressing ▲ / ▼ on the remote control, its respective options will appear on the right.

NOTE: The same menu is displayed in DTV (Digital TV) and ATV (Analogue TV) modes; however, where some items are not available in a mode, they will appear greyed out.

✂━	Press ▲ / ▼ and OK or ▶
Picture	Picture Mode
	Reset
	Backlight
	Contrast
	Brightness
	Colour
	Tint
	Sharpness
	Advanced Picture Settings
	Expert Picture Settings
	Display Settings

Press ▲ / ▼	Press ▲ / ▼ and OK or ▶
Sound	Balance
	Bass
	Treble
	Audyssey Premium Television
	Dynamic Range Control
	Dual
	Audio Level Offset
	TV Speakers
	Headphone Level
	Audio Description
	Digital Audio Output

Press ▲ / ▼	Press ▲ / ▼ and OK or ▶
Options	Recording Setup
	Media Player Setup
	MHL Setup
	HDMI CEC Control Setup
	Teletext
	Panel Lock
	AV Connection
	Power Management
	Blue Screen
	HDMI Information Display

Press ▲ / ▼	Press ▲ / ▼ and OK or ▶
Installation	Menu Language
	Country
	Location
	Channel Tuning
	DTV Settings
	Quick Setup
	Reset TV

Press ▲ / ▼	Press ▲ / ▼ and OK or ▶
Network	Network Setup
	Network Device Setup

Press ▲ / ▼	Press ▲ / ▼ and OK or ▶
3D	3D Auto Start
	2D to 3D Depth
	3D PIN
	3D Safety Settings
	3D Important Info

Press ▲ / ▼	Press ▲ / ▼ and OK or ▶
Timers	On Timer
	Sleep Timer

Press ▲ / ▼	Press ▲ / ▼ and OK or ▶
Get Help	Software Licences
	Software Upgrade
	System Information
	Store Demo

15

Startup Application

Before switching on the TV make sure that your aerial is connected and any decoder / media recorder, if applicable is connected and in **Standby**.

Quick Setup

1 Press the ⏻ button, Toshiba logo will appear. After that, The **Menu Language** screen will appear. This screen will appear the first time that the television is switched on and each time **Reset TV** is executed.

2 Press ▲▼◄► to select the menu language and press **OK**. The **Country/Language** screen will appear.

Menu Language			
Please press [OK] to proceed.			
English	Français	Deutsch	Español
Italiano	Português	Nederlands	Svenska
Densk	Norska	Suomi	Polski
Türkçe	Magyar	Slovensky	Český
Русский	Română	Български	Srpski
Ελληνικα	Hrvatski	Українська	Slovenščina

3 Press ▲ / ▼ to highlight **Next** and press **OK**. The **Time Zone** screen will appear.
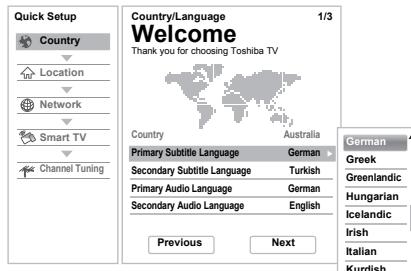
NOTE:
• Primary Subtitle Language, Secondary Subtitle Language, Primary Audio Language, and Secondary Audio Language can be set on **Subtitle and Audio** screen. (See page 75)

4 Press ▲ / ▼ to highlight **Time Zone** and press ► and to select a time zone.

5 Press ▲▼◄ ► to highlight **Next** and press **OK**. The **Location** screen will appear.
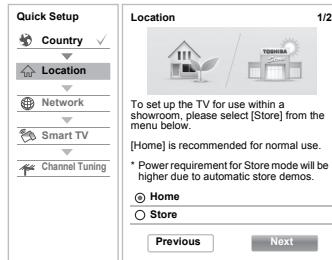
6 Press ▲ / ▼ to select **Home** or **Store** and press **OK**. For normal home use, select **Home**.

7 Press ▲▼◄ ► to highlight **Next** and press **OK**. The **Network Type** screen will appear.

8 Press ▲ to highlight **Network Type** and then press ► and ▲ / ▼ to select **Wireless**. Press **OK**.
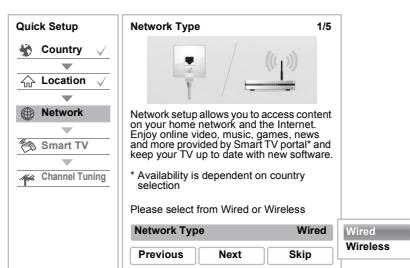
• When you select **Wired** (LAN cable connection), skip to step 14.

9 Press ▲▼◄ ► to highlight **Next** and press **OK**. The **Wireless Setup** screen will appear.

10 Press ▲ to highlight **Wireless Setup** and then press ► and ▲ / ▼ to select the Wireless Setup type. Press **OK**.
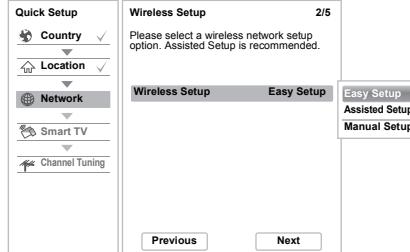
There are 3 methods for Wireless Setup:

• **Easy Setup (WPS)** - If the AP supports WPS, this method can be used. WPS is an industry standard designed to make connection of wireless LAN equipment and security setup easy. WPS will automatically configure all wireless settings.

   NOTE: WEP encryption may not be able to configured by easy setup.

• **Assisted Setup** - follow step 11.
   Input the Security Key only.
• **Manual Setup**, skip to step 12.
   Input the all settings.

NOTE: EXIT is available during settings.

⓫   In step 9, when you select **Easy Setup**;

   Press ▲▼◀ ▶ to highlight **Next** and press **OK**.
   The **Easy Setup** screen will appear.
   Press ▶ and ▲ / ▼ to select **PBC** (**Push Button Configuration**) or **PIN** (**Personal Identification Number**) and press **OK**.
   Press ▼ to highlight **Start Scan** and press **OK**.

   PBC - Following the on-screen instructions, push the appropriate button on your AP. When a window reporting that the setup is complete appears, press **OK**.

   PIN - When the PIN code window appears, enter the displayed PIN into your AP, and then press **OK** to continue the PIN Setup. When a message displays to report that the setup is complete, press **OK**.

To cancel searching for the AP:

Press **BACK** while searching for the AP. A message will appear, and then press ◀ / ▶ to select **Yes** and press **OK**.

⓬   In step 9, when you select **Assisted Setup**;

   Press ▲▼◀ ▶ to highlight **Next** and press **OK**.
   The **Assisted Setup** screen will appear.
   Press ▲ / ▼ to select the desired AP and press **OK**.

   NOTE: Check the MAC address on the label of the AP or in the manual, and select your AP.

   Press ▲ / ▼ to select **Security Key** and press **OK**.
   The Software Keyboard window will appear (page 46).
   Input the Security Key by using the Software Keyboard. To save your setting, press the **GREEN** button.

   NOTE:
   • The Security Key must adhere to these conditions:

- TKIP/AES: 8-63 ASCII or 64 Hex characters
- WEP: 5 or 13 ASCII or 10 or 26 Hex characters
• There is only one key ID to set for WEP encryption.

Press ▲ / ▼ to highlight **Done** and press **OK**.

NOTE:
• If Network Name is not displayed, see Manual Setup below to set Network Name before **Done** is selected.
• If **BACK** is pressed before **Done** is selected, settings are not saved.

When the message "Wireless configuration is complete." appears on screen, press **OK**.
The screen will skip to step 13.

⓭   In step 9, when you select **Manual Setup**;

   Press ▲▼◀ ▶ to highlight **Next** and press **OK**.
   The **Manual Setup** screen will appear. Press ▲ / ▼ to select **Network Name** and press **OK**.
   The Software Keyboard window will appear (page 46).
   Input the Network Name by using the Software Keyboard. To save your setting, press the **GREEN** button.

   Press ▲ / ▼ to select **Authentication** and then press ▶ and ▲ / ▼ to select **Open System**, **Shared Key**, **WPA-PSK** or **WPA2-PSK.** Press **OK**.

   Press ▲ / ▼ to select **Encryption**, and then press ▶ and ▲ / ▼ to select **None**, **WEP**, **TKIP** or **AES**. Press **OK**.

   NOTE:
   • Certain encryption types are only compatible with specific authentication types.
      - When Authentication is Open System, only **WEP** or **None** is compatible.
      - When Authentication is Shared Key, only **WEP** or **None** is compatible.
      - When Authentication is WPA-PSK or WPA2-PSK, only **TKIP** or **AES** is compatible.
   • When incompatible Authentication/Encryption pairings are detected, a warning message will be displayed, and no connection attempt will be made until the incompatibility is resolved.
   • There is only one key ID to set for WEP encryption.

   Press ▲ / ▼ to select **Security Key** and press **OK**.
   Input the Security Key by using the Software Keyboard (page 46).
   To save your setting, press the **GREEN** button.
   This item is greyed out when **Encryption** is **None**.

17

When **Encryption** is **WEP**, **Key ID** setting is available. Press ▲ / ▼ to select **Key ID** and press ▶ and ▲ / ▼ to select **1** (default), **2**, **3** or **4**.

Press ▲ / ▼ to highlight **Done** and press **OK**. When the message "Wireless configuration is complete." appears on screen, press **OK**.

NOTE: Settings are not saved if **BACK** is pressed before **Done** is selected.

14 The **Advanced Network Setup** screen will appear.

When the DHCP function of the router connected with this TV is On, you can set **Auto Setup** to **On** or **Off**. (This should usually be set to **On**.)
When the DHCP function of the router is Off, set **Auto Setup** to **Off**, and set the IP Address DNS address (es) manually.

Quick Setup	Advanced Network Setup	3/5
Country ✓		
Location ✓	Auto Setup	**On**
	IP Address	XXX . XXX . XX . X
Network ✓	Subnet Mask	XXX . XXX . XX . X
	Default Gateway	XXX . XXX . XX . X
Smart TV	Auto Setup	**On**
Channel Tuning	Primary DNS Address	XXX . XXX . XX . X
	Secondary DNS Address	XXX . XXX . XX . X
	Previous	Next
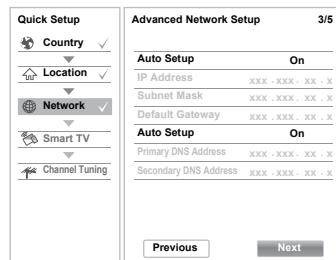
You can view the fixed MAC address for the TV, if one is installed.

Press ▲ / ▼ to highlight **Next**.

15 Press **OK**, and Network Connection Test will start.

A message will appear to indicate if the connection was successful or if could not be completed.

Network Connection Test	5/5
Network connection was completed successfully.	
OK	

NOTE: The result of Network Connection Test does not always guarantee the connection.

To cancel the Network Connection Test:
Press **EXIT** while testing.

When the network can be accessed, **Software Upgrade** starts automatically. When **Software Upgrade** is completed, proceed to the next step.

16 Press **OK**, and **TV Power On Control** screen will appear. Select **Disabled** or **Enabled** and highlight **Next**.

Quick Setup	TV Power On Control	1/2
Country ✓		
Location ✓		
Network ✓	We recommend you 'Enable' TV Power On Control for quick access to Toshiba services. Once enabled you will be able to view Internet and Menu systems faster. This mode will result in your TV using higher power consumption than when 'Disabled'.	
Smart TV	TV Power On Control Disabled	Disabled
Channel Tuning		Enabled
	Previous Next	

17 Press **OK**, and **Companion Device** screen will appear. Select **On** or **Off** from **Enable Control** and **Media Renderer** and highlight **Next**.

18 Press **OK**.
The **Auto Tuning** start up screen will appear with the option to select between **DTV and ATV**, **DTV** or **ATV** if available. Press ▶ and ▲ / ▼ to select the appropriate mode and press **OK**.

19 Press ▼ to highlight **Start Scan**, and press **OK**.

The television will start to search for available **DTV** and/or **ATV** channels. The progress bar will indicate the scan status.

You must allow the television to complete the search.

Auto Tuning - Antenna		
	Progress	Found
DTV Tune	4 %	0
ATV Tune	Waiting...	0
	Channel: 23	
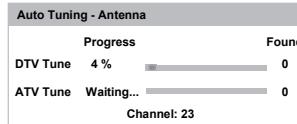
When the search is complete, the television will automatically select channel one.

The **Auto Tuning** screen will display the total number of services found.

20 Press ◀ / ▶ to view the **DTV** (digital channel) or **ATV** (analogue channel) lists.

㉑ Press ▲ / ▼ to move through the list to select a channel, and then press **OK** to view.

In **ATV** mode, some areas may receive duplicate stations. There may not be a clear picture or the signal may be weak, so the station order can be changed using **ATV Manual Tuning**.

REMEMBER: Press **TV** at any time to select between **ATV** and **DTV** modes.

NOTE: The time will be set automatically by transmission but can be advanced or decreased by using **Local Time Setting** in the **DTV Settings** screen.

When the search is complete, the **Auto Tuning** results screen will display the total number of services found.

㉒ Use ▲ / ▼ to move through the list to select a channel, and then press **OK** to view.

PLEASE NOTE

The **Quick Setup** menu can also be accessed at any time from the **Installation** menu.

Auto Tuning

NOTE: As new services are broadcast, it will be necessary to re-tune the television in order to view them.

*Auto Tuning will completely re-tune the television and can be used to update the channel list. **It is recommended that Auto Tuning is run periodically to ensure that all new services are added**. All current channels and settings, i.e. locked channels, will be lost.*

❶ Press ⚲ and ▲ / ▼ to highlight **Installation** icon.

❷ Press ▶ and ▲ / ▼ to select **Channel Tuning** and press **OK**.

❸ Press ▲ / ▼ to select **Auto Tuning** and press **OK**.

< Channel Tuning
Auto Tuning ▶
ATV Manual Tuning
DTV Manual Tuning
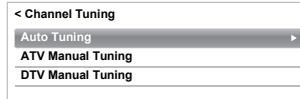
A message will appear, and then press ◀ / ▶ to select **Yes** and press **OK**.

❹ Press ▶ and ▲ / ▼ to select **DTV**, **DTV and ATV**, or **ATV**, if available, then highlight **Start Scan** and press **OK** to continue with the **Auto Tuning**.

Auto Tuning		
Tuning Mode	DTV	**DTV**
		DTV and ATV
		ATV
	Start Scan	
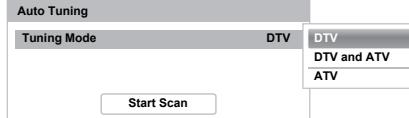
NOTE: If you have selected **Others** for the **Country** field in the **Installation** menu, and selected a tuning mode other than **DTV**, choose the optimum ATV broadcasting system (B/G, I, D/K or L).

The television will start to search for all available DTV and/or ATV services.

You must allow the television to complete the search.

When the search is complete, the **Auto Tuning** screen will display the services found.

❺ Press ▲ / ▼ to move through the list to select a channel and press **OK** to view.

19

ATV Manual Tuning

Tuning

*The television can be tuned-in manually using **ATV Manual Tuning**. For example, you might use the feature if the television cannot be connected to a media recorder/ decoder with a SCART lead or when you want to tune-in a station on another **System**.*

Use ◄ / ► to move across the screen and select any of the ATV Manual Tuning options. Then use ▲ / ▼ to adjust the settings.

ATV Manual Tuning
System
1 I A ↔ C 2 Q 0 V C R

1 2 3 4 5 6 7 8   9
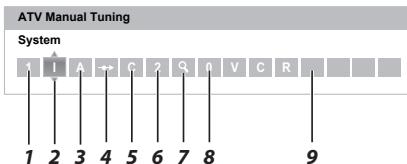
1 **Position**
The number to be pressed on the remote control to tune the channel.

2 **System**
Specific to certain areas.

3 **Colour System**
Factory set to Auto, should only be changed if problems are experienced, i.e. NTSC input from external source.

4 **Skip**
Set Skip to On (↷➔) or Off (–➔) for the selected channel. See page 21.

5 **Signal Class**
The channel classification.

6 **Channel**
The channel number on which a station is being broadcast.

7 **Search**
Search up and down for a signal.

8 **Manual Fine Tuning**
Only used if interference/weak signal is experienced. See page 85.

9 **Station**
Station identification. Use the ▲▼ and ◄► buttons to enter up to seven characters.

To allocate a position on the television for a decoder and media recorder: turn the decoder on, insert a pre-recorded film in the media recorder, press PLAY and manually tune.

1 In the **Channel Tuning** menu, press ▼ to select **ATV Manual Tuning** and press **OK**.

< Channel Tuning
Auto Tuning
ATV Manual Tuning ►
DTV Manual Tuning
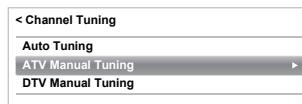
2 Press ▲ / ▼ to select the desired position. We suggest *Pos. 0* for a media recorder.

ATV Manual Tuning

Pos.	Channel	Station
0	C2	►
1	S10	
2	C7	
3	S40	
4	C22	
5	C25	
6	C28	
7	C30	
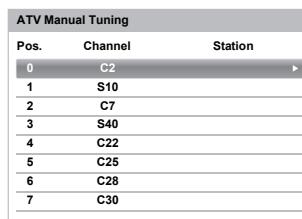
Different **Channel** numbers may be displayed.

3 Press **OK** to select. If the channel chosen for the media recorder is set to skip, Skip should be removed before storing.

4 Press ► to select **System** and press ▲ / ▼ to change if required.

ATV Manual Tuning
System
1 I A ↔ C 2 Q 0

5 Then press ► to select **Search**.

6 Press ▲ / ▼ to begin the search. The search symbol will flash.

ATV Manual Tuning
Search
1 I A ↔ C 2 Q 0

7 Each signal will show on the television. If it is not your media recorder, press ▲ / ▼ again to restart the search.

8 When your media recorder signal is found, press ▶ to move along to **Station**. Use ▲▼◀ ▶ to put in the required characters, *e.g.* **VCR**.

```
ATV Manual Tuning
Station
1  I  A  ↔  C  2  🔍  0  V  C  R
```

9 Press **OK** to save.

10 Repeat for each *position* you want to tune.

11 Press **EXIT** when you have finished.

PLEASE NOTE

This television has direct channel entry if the channel numbers are known.
Select the **ATV Manual Tuning** screen in *Step 3*. Enter the **Position number**, the **System**, then **C** for standard (terrestrial) channels or **S** for cable channels and the **Channel** number. Press **OK** to save.

Skip

To prevent certain channels from being viewed, positions can be skipped.

1 Select **ATV Manual Tuning** from the **Channel Tuning** menu.

2 Press ▲ / ▼ to highlight the position to be skipped and press **OK**.

Pos.	Channel	Station
0	**C2**	▶
1	S10	
2	C7	
3	S40	
4	C22	
5	C25	
6	C28	
7	C30	

ATV Manual Tuning
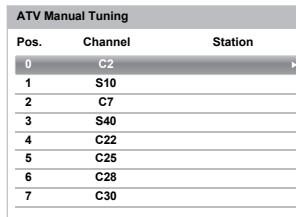
3 Press ▶ to select **Skip**.

4 Press ▲ / ▼ to turn **Skip** on and press **OK**.

☞→ on the screen indicates a skipped position.

```
ATV Manual Tuning
Skip: On
1  I  A  ☞→  C  2  🔍  0
```

5 Press **BACK** and repeat from *Step 2* or press **EXIT**.

Each position has to be *individually* selected. To turn **Skip** off, repeat the procedure for each position.

Skipped positions *cannot* be selected by **P⌃** and **P⌄** or by the controls on the television but *can* still be accessed by the number buttons on the remote control.

21

Sorting positions

Channels may be moved and saved to the position of your choice.

1 Select **ATV Manual Tuning** from the **Channel Tuning** menu.

2 With the list of channels showing, press ▲ / ▼ to highlight the position to be moved and press ▶.

ATV Manual Tuning		
Pos.	Channel	Station
0	C2	▶
1	S10	
2	C7	
3	S40	
4	C22	
5	C25	
6	C28	
7	C30	

3 Press ▲ / ▼ to move through the list to your preferred position. As you do so, the other channels will move to make room.

4 Press ◀ to save your move.

Repeat as necessary and press **EXIT**.

DTV Manual Tuning

Manual Tuning

This feature is available for service engineers or can be used for direct channel entry if the multiplex channel is known.

1 Select **DTV Manual Tuning** from the **Channel Tuning** menu and press **OK**.

DTV Manual Tuning		
	WEAK AVERAGE STRONG	
Signal Strength		
	Quality	GOOD
Channel		22
Frequency		xxx.x MHz
Bandwidth		7 MHz
	Start Scan	

2 Enter the multiplex number using the number buttons or use ◀ / ▶ to adjust the number up or down.

3 Highlight **Start Scan** and press **OK**. The television will automatically search for that multiplex.

DTV Manual Tuning			
0 New Channels - Total 6			
New	Pos.	Name	Type
	C2	ABC ONE	▬
	C4	ABC TWO	▬
	C5	ABC THREE	▬
	C7	ABC NEWS 24	▬
	C12	ABCi	▬

When the multiplex is found, any channels that are not currently in the channel list will be added and the channel information at the top of the screen will be updated.

4 Repeat as necessary. Press **EXIT** to finish.

22

DTV Settings

Channels

The channel order may be changed to suit your personal preference.

1 Select **DTV Settings** from the **Installation** menu and press **OK**.

2 Press ▼ to select **Channels** and press **OK**.

< DTV Settings
Channels ▶
Subtitle and Audio
Parental PIN Setup
Parental Control
Local Time Setting
Standby Channel Update
Dynamic Scan
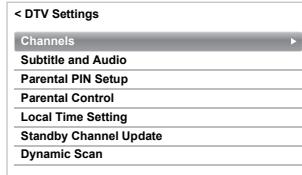
3 For your convenience, you can jump to specific places in the list by one of two methods.

Channels		Antenna TV	
Line No.	1/10		
Pos.	Name		
C2	ABC ONE		
C4	ABC TWO		
C5	ABC THREE		
C23	CABC Channel		
C7	ABC NEWS 24		
C12	ABCi		
C27	AA		
C40	AC		
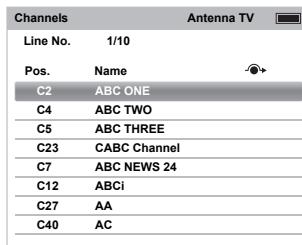
Line Number Jump — Use the **number buttons** (0-9) to input the line number you want to select and press **OK**.

It is also possible to change the Position number of a particular channel.

Renumber — Press the **RED** button to renumber the highlighted channel. Edit the channel number using the **number buttons** and press **OK**. If the position number you input already exists, a confirmation window will appear.

Pos.	Name
	ABC ONE

Move — Press the **GREEN** button to activate the **Move** feature. Press ▲ / ▼ to select the channel you wish to move and press **OK** to check.
If you wish to move multiple channels at once, select another channel and check in the same way. Repeat as necessary.
Once all desired channels have been checked, press ▲ / ▼ to place the focus at the position to which you wish to move the channels. The channels will be inserted above the highlighted channel. Press the **GREEN** button to execute the move.

Channels		Antenna TV	
Line No.	1/10		
Pos.	Name		
☑ C2	ABC ONE		
☐ C4	ABC TWO		
☐ C5	ABC THREE		
☐ C23	CABC Channel		
☐ C7	ABC NEWS 24		
☐ C12	ABCi		
☐ C27	AA		
☐ C40	AC		
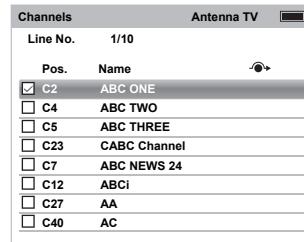
Position No. Sort — Press the **YELLOW** button. A confirmation window will appear. Press ◀ / ▶ to select **Yes** and press **OK**.

Your existing channel order will be lost. Do you wish to continue?
◀ Yes ▶

Standby Channel Update

If the **Standby Channel Update** *is set to* **On**, *when the TV is in Standby, Digital Tuning is automatically executed.*

1 Select **DTV Settings** from the **Installation** menu and press **OK**.

2 Press ▼ to select **Standby Channel Update** and press ▶ and ▲ / ▼ to select **On**.

Location setting

You can select either **Home** *or* **Store** *mode.* **Home** *is recommended for normal home use. Select* **Store** *when using the television for displaying in a shop, etc.*

1 Select **Location** from the **Installation** menu.

2 Press ▶ and ▲ / ▼ to select **Home** or **Store**.

Analogue switch-off

This is a **digital** television which is integrated to allow the use of both **digital** and **analogue** services. However, during the lifetime of this set it is very likely that **analogue** services will be switched off to allow for more new **digital** services.

This 'switch-off' will happen in a number of phases, which will be advertised in your area well in advance. It is recommended that at each phase the television is re-tuned to ensure that existing and new **digital** services can be viewed without disruption.

24

General controls

Quick Menu

Quick Menu helps you access some options quickly, such as **Picture Mode, Picture Size, More Information, Sleep Timer** etc.

Press **QUICK** to open the **Quick Menu** and use ▲ / ▼ to select the option.

Quick Menu	
Intel® WiDi	
Picture Mode	Standard
Picture Size	Wide
3D Settings	
More Information	
Channel Options	
Sleep Timer	
HDMI CEC Device Control	
Speakers	TV Speakers
Headphone Level	30
Wireless Information	
Recording Information	
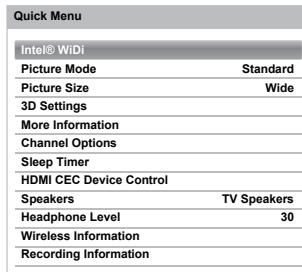
NOTE: Quick Menu items are different depending on the current mode.

Quick menu item example

Mode	Quick menu item	Description
When viewing a TV programme or pictures from the external input Single Window	Intel® WiDi	See page 61.
	Picture Mode	See page 35.
	Picture Size	See page 33.
	3D Settings	See page 27.
	More Information	See page 72.
	Channel Options	See page 74.
	Sleep Timer	See page 70.
	HDMI CEC Device Control	See page 80.
	Speakers	See page 81.
	Headphone Level	See page 32.
	Wireless Information	See page 43.
	Recording Information	See page 72.
When using EPG	Genre Colour	See page 73.
	EPG Update / Cancel EPG Update	See page 72.
Media Player	Picture	See page 35.
	3D Settings	See page 27.
	Sound	See page 31.
	Interval Time	See page 64.
	Repeat	See page 64.
	Background Music	See page 65.
	Play List	See page 65.
	Sleep Timer	See page 70.
	Speakers	See page 81.
	Headphone Level	See page 32.

Selecting channels

To select a channel, use the numbered buttons on the remote control.

Channels can also be selected using **P⌃** and **P⌄**.

To display on-screen information such as channel, input mode or stereo/mono signal, press [i+]. Press again to cancel.

The Time Display – analogue only

The time display facility allows the current (text service) time to be seen on the television screen.

Press ⏰/⊟ whilst watching a normal television broadcast to see the time display from the broadcaster. It will remain on screen for about 5 seconds.

NOTE: This display may not be available in some cases.

Stereo and Bilingual transmissions

For DTV programmes

For stereo or dual mono broadcasts, press ⚪I/II and use ◀ / ▶ to select settings.

Mode Display	Pressing ▶
⚪⚪ Stereo	Stereo → Left → Right
●○ Dual mono	Dual 1 → Dual 2 → Dual
⚪ Mono	–
⚪⚪ Multichannel	–

For multi-audio track broadcasts, press ⚪I/II repeatedly to change the audio language (see "Audio languages" on page 75).

For ATV programmes

If stereo or dual language broadcasts are transmitted, the word **Stereo** or **Dual** will appear on the screen each time channels are changed, disappearing after a few seconds. If the broadcast is not in stereo, the word **Mono** will appear.

Stereo… Press ⚪I/II to select **Stereo** or **Mono**.

Bilingual… Bilingual transmissions are rare. If they are transmitted, the word **Dual** will be displayed. Choose the required programme number, and if the word **Dual** appears, press ⚪I/II to select **Dual 1**, **Dual 2** or **Mono**.

Using 3D functions

Before using 3D programming, see and follow "Important information for 3D viewing" section on page 99.

Viewing 3D programming requires the following:

• Toshiba FPT-AG03 (supplied)
• Compatible 3D playback device or 3D source
• 3D capable high quality HDMI cable

Viewing 3D images

Incoming video signals can either be in 2D or 3D format. A 2D signal can be viewed in either 2D or 3D, and 3D can be viewed in either 2D or 3D. If the TV can detect the fact that a signal is 3D, it can change to 3D mode automatically – see "Setting the auto start mode" (on page 28). Otherwise you can change the viewing mode using the 3D button. Finally, the format of the 3D signal can be either Side by Side (SBS) or Top and Bottom (TB). You may have to choose the correct format if the TV can not detect it automatically – see "Switching display mode or selecting 3D format".

Moreover, you can change 2D images to 3D images by pressing the 3D button when viewing in 2D.

NOTE:
• When 3D format signal is not received, display mode is not switched to 3D.
• If appropriate mode and format are not selected, 3D image is not correctly displayed.
• There will be restrictions on the Picture Size settings for 3D Mode and 2D Mode.
• There are individual differences in perception of 3D images.
• When viewing 3D images, wear the 3D Glasses.
• The 2D to 3D conversion function is activated and controlled by you according to your personal preferences.
• The 2D to 3D conversion function is meant for enjoyment of 2D home video, and other 2D content you create, in 3D according to your personal preferences.
• The 2D to 3D conversion function is not intended for use with pre-recorded 2D copyrighted content owned by a third-party unless the copyright owner has given direct or indirect permission, or unless applicable law permits such use.

Switching display mode or selecting 3D format

There are four modes for watching TV.

Mode	Description
3D*	Displays 3D images.
2D	Changes 3D images to 2D.
2D to 3D*	Changes 2D images to 3D.
Native	Displays a received signal format as it is.

* This mode does not support all content depending on its input source format.

3D format select

If a right and left images are same in Native mode, select SBS.
If a top and bottom images are same in Native mode, select TB. 3D formats are the following.

3D format	Description	
Side by Side (SBS)	Images for the left and right eyes are positioned side-by-side.	
Top and Bottom (TB)	Images for the left and right eyes are positioned at the top and bottom of the screen.	
Frame Packing (FP) *	Image for the left and right eyes for two frames are positioned at the top and bottom of the screen.	

* This format cannot be selected manually.

The 3D button's operation

The behaviour of **3D** when viewing in Native mode is different depending on the input mode.

Depending on the input mode, the screen for selecting 2D or 3D is displayed or the display mode switches between 2D and 3D.

To switch to 3D mode:

- Set **3D Auto Start** in the **3D** menu to **3D**.
- Press **3D** while viewing 2D mode or Native mode.

				Press 3D button	
Input Signal		Trigger of Switching Display Mode			
Type	Additional Information	Format	Source Signal	Select 3D	Select 2D to 3D
3D Format Signal	With 3D Auto Detect Information	FP	[3D] / [3D]	* [3D]	
		SBS	[3D 3D]	* [3D]	
		TB	[3D/3D]	* [3D]	
	Without 3D Auto Detect Information	SBS	[3D 3D]	* [3D]	[3D 3D]
		TB	[3D/3D]	[D3/D3]	[3D/3D]
2D Format Signal			[3D]	[D3]	* [3D]

* Correct 3D image

To select 3D format from the Quick menu in 3D mode:

❶ Press **QUICK** to open the **Quick Menu**.

❷ Press ▲ / ▼ to select **3D Settings** and press **OK**.

❸ Press ▲ / ▼ to select **3D Format Select** and press **OK**.

❹ Press ◄ / ► to select **3D (SBS)** or **3D (TB)**.

				Quick menu	
Input Signal		Trigger of Switching Display Mode		3D Format Select	
Type	Additional Info	Format	Source Signal	SBS	TB
3D Format Signal	With 3D Auto Detect Information	FP	[3D] / [3D]		
		SBS	[3D 3D]		
		TB	[3D/3D]		
	Without 3D Auto Detect Information	SBS	[3D 3D]	* [3D]	[3D 3D/2D 2D]
		TB	[3D/3D]	[D3/D3]	* [3D]
2D Format Signal			[3D]	[D3]	[3D/2D]

* Correct 3D image

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To switch to 2D mode:

- Set **3D Auto Start** in the **3D** menu to **2D**.
- Press **3D** while viewing 3D mode.

Input Signal		Trigger of Switching Display Mode		Press 3D button
Type	Additional Info	Format	Source Signal	
3D Format Signal	With 3D Auto Detect Information	FP	3D / 3D	* 3D
		SBS	3D 3D	* 3D
		TB	3D/3D	* 3D
	Without 3D Auto Detect Information	SBS	3D 3D	3D 3D
		TB	3D/3D	3D/3D
2D Format Signal			3D	* 3D

* Correct 2D image

To select 2D format from the Quick menu in 2D mode:

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **3D Settings** and press **OK**.

3 Press ▲ / ▼ to select **2D Format Select** and press **OK**.

4 Press ◄ / ► to select **Native, 2D (SBS)** or **2D (TB)**.

Input Signal				Quick menu		
			Trigger of Switching Display Mode	2D Format Select		
Type	Additional Info	Format	Source Signal	SBS	TB	Native
3D Format Signal	With 3D Auto Detect Information	FP	3D / 3D			
		SBS	3D 3D	* 3D		3D 3D
		TB	3D/3D		* 3D	3D/3D
	Without 3D Auto Detect Information	SBS	3D 3D	* 3D	2D 2D	3D 3D
		TB	3D/3D	3/3	* 3D	3D/3D
2D Format Signal			3D	3	2D	3D

* Correct 2D image

NOTE: Take off the 3D Glasses in 2D mode.

To switch to Native mode:

- Press **3D** while viewing 3D mode.
- Press **3D** while viewing 2D to 3D mode.

   NOTE: When 3D format signal with 3D Auto Detect Information is received, it is not possible to switch to Native.

- From the **Quick Menu** in 2D mode.

1 In the **Quick Menu**, press ▲ / ▼ to select **3D Settings** and press **OK**.

2 Press ▲ / ▼ to select **2D Format Select** and press **OK**.

3 Press ◄ / ► to select **Native**.

   NOTE: When Frame Packing is input, 2D Format Select will be greyed out.

To switch to 2D to 3D mode:

Press **3D** while viewing 2D or Native mode.

NOTE: Depending on the input mode, the display mode switches between 2D and 3D.

Setting the auto start mode

Controls what the TV does when it detects a 3D signal.

1 Press ⚙ and ▲ / ▼ to highlight **3D** icon.

2 Press ► and ▲ / ▼ to select **3D Auto Start**.

3 Press ► and ▲ / ▼ to select **3D**, **2D**, or **Off** and press **OK**.

< 3D	
3D Auto Start	**3D** ►
2D to 3D Depth	**3**
3D PIN	
3D Safety Settings	
3D Important Info	

3D
2D
Off
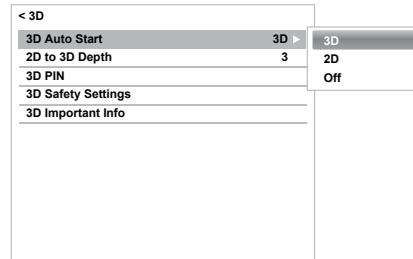
Option	Description
3D	Displays as 3D mode automatically when 3D format signal is received.
2D	Displays as 2D mode automatically when 3D format signal is received.
Off	Displays a screen that allows you to select 3D or 2D when 3D format signal is received.

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Adjusting 2D to 3D Depth

You can adjust the level of 3D.

From the Menu:

1 In the **3D** menu, press ▲ / ▼ to select **2D to 3D Depth** and press **OK**.

2 Press ◄ / ► to select **1**, **2**, **3**, **4**, or **5** and press **OK**.

The higher the number, the stronger the 3D effect.

From the Quick Menu:

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **3D Settings** and press **OK**.

3 Press ▲ / ▼ to select **2D to 3D Depth** and press **OK**.

4 Press ◄ / ► to select **1**, **2**, **3**, **4**, or **5** and press **OK**.

The higher the number, the stronger the 3D effect.

NOTE: Depending on the content, setting the 3D effect to a high level may result in blurring of the image contours and background.

If you experience any abnormal sensation or feel fatigue or nausea when viewing 3D images, stop watching and rest until the symptoms subside. Before viewing again, adjust the 3D effect to a lower number and view at a level at which the symptoms do not occur.

Setting the 3D PIN code

*A 3D PIN code is necessary for using **3D Safety Settings**.*

To enter a new PIN code:

1 In the **3D** menu, press ▲ / ▼ to select **3D PIN** and press **OK**.

2 Press the number buttons to enter a 4-digit number. Confirm the code.

NOTE: PIN code cannot be set to "0000".

To change or delete your PIN code:

1 In the **3D** menu, press ▲ / ▼ to select **3D PIN** and press **OK**.

2 Press the number buttons to enter your 4-digit PIN code.

3 Select **Change PIN** or **Delete PIN** and press **OK**.

NOTE:
• PIN code cannot be set to "0000".
• If PIN is deleted, **3D Safety Settings** is greyed out, and the settings are reset to the factory default.

Setting 3D Start Message

When this feature is set to On, a message is displayed onscreen when a 3D signal is received.

1 In the **3D** menu, press ▲ / ▼ to select **3D Safety Settings** and press **OK**.

2 Enter your 4-digit 3D PIN code.

3 Press ▲ / ▼ to select **3D Start Message**.

4 Press ► and ▲ / ▼ to select **On** or **Off**.

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Setting 3D Lock

When this feature is set to On, you must enter 3D PIN code for changing display mode.

1 In the **3D** menu, press ▲ / ▼ to select **3D Safety Settings** and press **OK**.

2 Enter your 4-digit 3D PIN code.

3 Press ▲ / ▼ to select **3D Lock**.

4 Press ▶ and ▲ / ▼ to select **On**.

Setting 3D Timer Lock

When the 3D Timer Lock feature is set to On, neither the PIN input window nor the 3D start message will be shown while the 3D Enable timer is active, even if a switch to 3D Mode occurs. This helps to avoid asking for the 3D Lock PIN and displaying 3D start message every time when switching to 3D.

NOTE: This feature cannot be selected until the **3D PIN** is set.

1 In the **3D** menu, press ▲ / ▼ to select **3D Safety Settings** and press **OK**.

2 Enter your 4-digit 3D PIN code.

3 Press ▲ / ▼ to select **3D Timer Lock**.

4 Press ▶ and ▲ / ▼ to select **On**.

Setting Enable 3D Timer

This feature helps to remind you not to watch 3D video for extended periods of time. Once a set period of time has passed, a dialogue will be shown asking you if you wish to continue viewing or not.

1 In the **3D** menu, press ▲ / ▼ to select **3D Safety Settings** and press **OK**.

2 Enter your 4-digit 3D PIN code.

3 Press ▲ / ▼ to select **Enable 3D Timer**.

4 Press ▶ and ▲ / ▼ to select **30**, **60**, **90**, or **120** minutes.

5 To cancel the timer, select **Off**.

Displaying 3D Important Info

1 In the **3D** menu, press ▲ / ▼ to select **3D Important Info** and press **OK**.
A message will appear.

Switching left and right images

The left and right eye shutter timing of the glasses can be swapped. If 3D images look blurred, switch the left and right sides of the 3D image.

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **3D Settings** and press **OK**.

3 Press ▲ / ▼ to select **Left and Right Image**.

4 Press ▶ and ▲ / ▼ to select **Swapped** and press **OK**.

Sound controls

Volume controls and sound mute

Volume
Press ⊿+ or ⊿− to adjust the volume.

Sound Mute
Press ⋈ once to turn the sound off and again to cancel.

Dual

If a programme or film is being broadcast with a soundtrack in more than one language, the **Dual** *feature allows selection between them.*

1 Press ⚙ and ▲ / ▼ to highlight **Sound** icon.

2 Press ▶ and ▲ / ▼ to select **Dual** and press ▶ and ▲ / ▼ to choose between **Dual 1** or **Dual 2**.

< Sound	
Balance	**0**
Bass	**0**
Treble	**0**
Audyssey Premium Television	
Dynamic Range Control	**On**
Dual	**Dual 1**
Audio Level Offset	
TV Speakers	**On**
Headphone Level	
Audio Description	
Digital Audio Output	

Balance

1 In the **Sound** menu, press ▲ / ▼ to select **Balance** and press ◀ / ▶ to emphasize left and right speaker balance.

Bass, Treble

1 In the **Sound** menu, press ▲ / ▼ to select **Bass** or **Treble**.

2 Press ◀ / ▶ to change the setting.

TV Mounting (Wall/Table)

Audyssey TV Mounting *feature can provide an appropriate sound depending on the TV installation type, that TV is installed on a wall or a TV table.*

1 In the **Sound** menu, press ▲ / ▼ to select **Audyssey Premium Television** and press **OK**.

2 Press ▲ / ▼ to select **TV Mounting**.

3 Press ▶ and ▲ / ▼ to select **Wall** or **Table**.

Dynamic Volume®

Audyssey Dynamic Volume® *controls volume levels to eliminate loud spikes and raise soft dialog for more enjoyable television and movie viewing.*

1 In the **Sound** menu, press ▲ / ▼ to select **Audyssey Premium Television** and press **OK**.

2 Press ▲ / ▼ to select **Dynamic Volume**.

3 Press ▶ and ▲ / ▼ to select **Day**, **Night** or **Off**.

Audyssey ABX™

Audyssey ABX™ *technology uses sophisticated driver analysis and low frequency monitoring to extend the range and bass of small speakers. This enables the system to produce lower frequencies that would be possible with a traditional system of the same size.*

1 In the **Sound** menu, press ▲ / ▼ to select **Audyssey Premium Television** and press **OK**.

2 Press ▲ / ▼ to select **Audyssey ABX**.

3 Press ▶ and ▲ / ▼ to select the desired **Audyssey ABX** level (**Low**, **High** or **Off**).

Dynamic Range Control

This feature allows control of audio compression for some digital TV programmes (MPEG-1 and MPEG-2 audio programmes are not supported).

1 In the **Sound** menu, press ▲ / ▼ to select **Dynamic Range Control**.

2 Press ▶ and ▲ / ▼ to select **On** or **Off**.

Audio Level Offset

Sometimes there can be large changes in volume when switching from a DTV 5.1ch to a DTV 2ch, an ATV channel, or an external input. Using the **Audio Level Offset** *feature reduces these volume differences.*

1 Set the volume level usually used when watching a DTV 5.1ch programme.

2 Tune to a channel which is DTV 2ch, ATV or an external input.

3 In the **Sound** menu, press ▲ / ▼ to select **Audio Level Offset** and press **OK**.

4 Press ▲ / ▼ to select an option, and then press ◄ / ► to adjust the volume level.

< Audio Level Offset		
DTV 2ch	0 ►	0 ———————◎
ATV	0	
External Input	0	
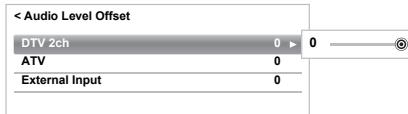
NOTE:
• The available item changes depending on the current input source. For example, while watching a DTV 2ch programme, only **DTV 2ch** is available and the other two items are greyed out in the menu. This allows you to easily adjust according to each condition.
• When watching a DTV 5.1ch programme, this feature is not available.

TV Speakers On/Off

This feature allows you to turn the TV speakers off when connecting the audio system.

1 In the **Sound** menu, press ▲ / ▼ to select **TV Speakers**.

2 Press ► and ▲ / ▼ to select **Off**.

To turn on the built-in speakers:

Select **On** in step 2.

Headphone Settings

This setting is used to set the sound output when headphones are connected.

Speaker Link	Headphone	Speakers
On	Sound is output (◿ ± is available.)	No sound
Off	Sound is output (Headphone level menu is available.)	Sound is output (◿ ± is available.)

1 In the **Sound** menu, press ▲ / ▼ to select **Headphone Level** and press **OK**.

2 Press ▲ / ▼ to select **Speaker Link** and press ► and ▲ / ▼ to select **On** or **Off**.

< Headphone Level		
Speaker Link	On ►	On
Headphone Level	30	Off

3 If you select **Off**, then highlight **Headphone Level** and use ◄ / ► to adjust the headphone sound.

Audio Description

Audio Description is an additional narrative sound track for visually impaired individuals to understand and enjoy the story line more fully. The letters AD will be displayed in the channel banner when programmes contain AD content.

1 In the **Sound** menu, press ▲ / ▼ to select **Audio Description** and press **OK**.

2 Press ▲ / ▼ to select **Audio Description** and press ► and ▲ / ▼ to select **On**.

The **AD** button on the remote control can also be used to toggle the **Audio Description** feature between **On** and **Off**.

3 To adjust the level of the audio description sound to the main sound, highlight **Mixing Level** and press ◄ / ►.

< Audio Description		
Audio Description	On	
Mixing Level	80 ►	80 ———◎—

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Widescreen viewing

Depending on the type of broadcast being transmitted, programmes can be viewed in a number of formats.

WIDE

Use this setting when watching a widescreen DVD, widescreen video tape or a 16:9 broadcast (when available). Due to the range of widescreen formats (16:9, 14:9, 20:9 etc.) black bars may be visible on the top and bottom of the screen.
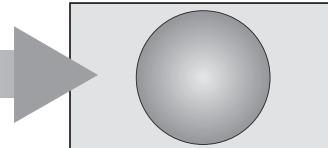
4:3

Use this setting to view a true 4:3 broadcast.
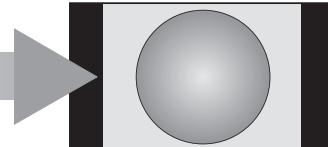
SUPER LIVE

This setting will enlarge a 4:3 image to fit the screen by stretching the image horizontally and vertically, holding better proportions at the centre of the image. Some distortion may occur.
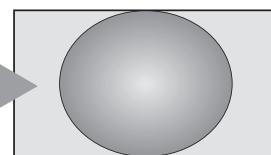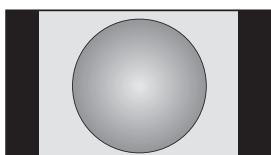
CINEMA

When watching 'all sides panel format' films/video tapes, this setting will eliminate or reduce the black bars at all sides of the screen by zooming in and selecting the image without distortion.
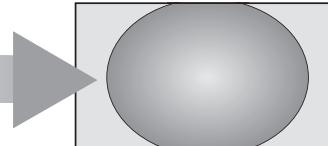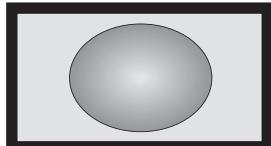
SUBTITLE

When subtitles are included on a letterbox format broadcast, this setting will raise the picture to ensure that all the text is displayed.

SUBTITLE
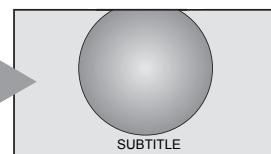
14:9

Use this setting when watching a 14:9 broadcast.
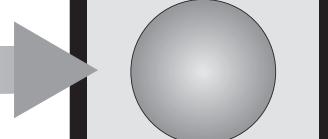
NATIVE

This setting will show the picture without overscan, i.e. WYSIWYG.
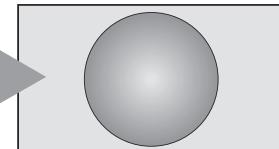
PC NORMAL

This setting will show the picture without overscan, i.e. WYSIWYG. This option is only available when watching a PC signal source via HDMI or PC terminal.
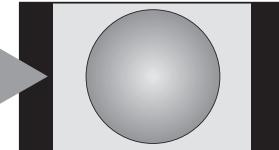
PC WIDE

This setting will show the picture without overscan or side panels. This option is only available when watching a PC signal source via HDMI or PC terminal.
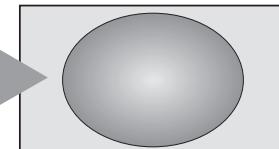
Dot by Dot

"Dot by Dot" is a non-scaling display. Depending on the input signal format, the picture is displayed with side panels and/or bars at the top and bottom (e.g. VGA input source).
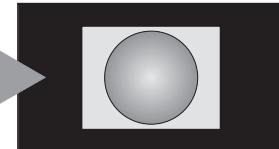
Press the ⬚ button on the remote control to display the list of available widescreen formats.

Press the button repeatedly to highlight the required format.

The **Quick Menu** feature can also be used to select **Picture Size**.

AV format

Picture Size
Wide
4:3
Super Live
Cinema
Subtitle
14:9
Native

PC format

Picture Size
PC Normal
PC Wide
Dot by Dot

Using the special functions to change the size of the displayed image (i.e. changing the height/width ratio) for the purposes of public display or commercial gain may infringe on copyright laws.

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Picture controls

Most of the picture controls and functions are available in both **digital** and **analogue** modes. *PLEASE NOTE: Features not available will be greyed out.*

Picture Mode

This television offers the choice of personalising the picture style.

AutoView, **Dynamic**, **Standard**, **Movie Night**, **Movie Day**, **Movie Pro**, **Store**, **Game** *and* **PC** *are preset options and affect many features/settings within the television.*

NOTE:
• Because the **AutoView** mode automatically adjusts picture settings based on ambient light conditions and input signal content, the **Auto Brightness Sensor** and **Expert Picture Setting** is greyed out when it is selected.
• **Store** mode is only available when **Location** is set to **Store**.
• **Game** mode is available in external input mode (other than aerial input). When you select **Game** mode, suitable widescreen formats will be selected.
• **PC** mode is available in RGB/PC input mode or HDMI input mode.

1 Press ⚒ and ▲ / ▼ to highlight **Picture** icon and press **OK**.

2 Press ▶ and ▲ / ▼ to select **Picture Mode** and press **OK**.

< Picture	
Picture Mode	Standard ▶
Reset	
Backlight	0
Contrast	100
Brightness	0
Colour	0
Tint	0
Sharpness	0
Advanced Picture Setting	
Expert Picture Setting	
Display Setting	
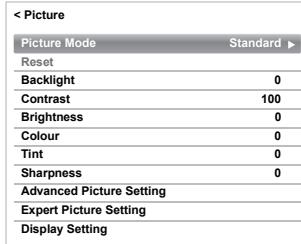
3 Press ▲ / ▼ to select the picture mode you prefer and press **OK**.

NOTE: The picture mode you select affects the current input only. You can select a different picture mode for each input.

Picture preferences

*You can customize current picture mode settings as desired. For example, while selecting "**Dynamic**", if you change the following items, such as **Backlight**, **Contrast**, **Brightness**, **Colour**, **Tint**, **Sharpness** and the **Advanced Picture Settings** items, your new settings are saved for "**Dynamic**" picture mode.*

1 In the **Picture** menu, press ▲ / ▼ to select either **Backlight**, **Contrast**, **Brightness**, **Colour**, **Tint** or **Sharpness** and press **OK**.

2 Press ◀ / ▶ to adjust the settings and press **OK**.

Reset

*This feature resets all picture settings to the factory settings except **Picture Mode**.*

1 In the **Picture** menu, press ▲ / ▼ to select **Reset** and press **OK**.

2 A confirmation message will appear. Press ◀ / ▶ to select **Yes** and press **OK**.

ColourMaster

*When **ColourMaster** is set to **On**, it allows the 'Base Colour Adjustment' feature to become available.*

1 In the **Picture** menu, press ▲ / ▼ to select **Advanced Picture Settings** and press **OK**.

2 Press ▼ to select **ColourMaster** and press ▶ and ▲ / ▼ to select **On** or **Off**.

< Advanced Picture Settings		
ColourMaster	Off ▶	On
Base Colour Adjustment		Off
Colour Temperature		
Auto Brightness Sensor	On	
Active Backlight Control	High	
Black/White Level	Middle	
Noise Reduction		
Resolution+	On	
ClearScan	High	
Reset		
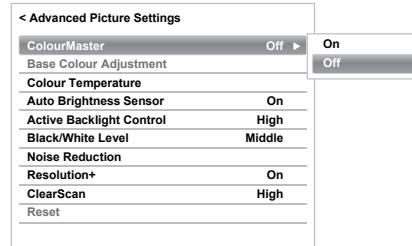
Base Colour Adjustment

*The **Base Colour Adjustment** feature allows the adjustment of individual colours to suit personal preference. This can be useful when using an external source.*

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Base Colour Adjustment** and press **OK**.

2 Press ▲ / ▼ to select an option and press ▶ to move to the adjustment window.

Base Colour Adjustment			
	Hue	Saturation	Brightness
☐ Red	0	0	0 ▶
Green	0	0	0
Blue	0	0	0
Yellow	0	0	0
Magenta	0	0	0
Cyan	0	0	0
Reset			
Edit			
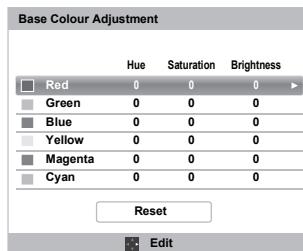
3 Press ◀ / ▶ to select **Hue**, **Saturation** or **Brightness** and press ▲ / ▼ to adjust the settings as required.

	Hue	Saturation	Brightness
Red	▲ 0 ▼	0	0
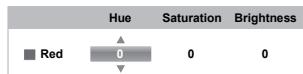
4 Press **BACK** to return to the previous menu.

To return to the factory settings, select **Reset** and press **OK**.

Colour Temperature

Colour Temperature *increases the "warmth" or "coolness" of the picture by increasing the red or blue tint.*

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Colour Temperature** and press **OK**.

2 Press ▲ / ▼ to select **Colour Temperature** and press **OK**.

3 Press ▲ / ▼ to select **Cool**, **Natural** or **Warm** to suit your preference and press **OK**.

4 Press ▲ / ▼ to select **Red Level**, **Green Level** or **Blue Level** and press ◀ / ▶ to adjust the level.

NOTE: To return the adjustments to the factory defaults, select **Reset** and press **OK**.

Auto Brightness Sensor

When the Auto Brightness Sensor is activated, it will automatically optimise the backlighting levels to suit ambient light conditions.

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Auto Brightness Sensor** and press **OK**.

2 Press ▲ / ▼ to select **On** or **Off** and press **OK**.

Active Backlight Control

*When the **Active Backlight Control** feature is activated, it will control the backlighting levels depending on various scenes such as picture motion, bright scene or dark scene.*

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Active Backlight Control** and press **OK**.

2 Press ▲ / ▼ to select **High, Low** or **Off** and press **OK**.

　　High: To control the backlighting levels depending on various scenes such as picture motion, bright scene or dark scene

　　Low: To control the backlighting levels for dark scene

Black/White Level

Black/White Level *increases the strength of dark areas of the picture to improve the definition.*

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Black/White Level** and press **OK**.

2 Press ▲ / ▼ to select **High**, **Middle**, **Low** or **Off** and press **OK**.

MPEG NR – Noise Reduction

When watching a DVD, the compression may cause some words or picture elements to become distorted or pixelated.
Using the MPEG NR feature reduces this effect by smoothing out the edges.

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Noise Reduction** and press **OK**.

2 Press ▼ to select **MPEG NR** and press **OK**.

< Noise Reduction	
MPEG NR	Low ►
DNR	Auto
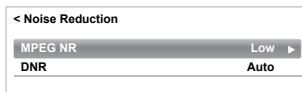
3 Press ▲ / ▼ to select **Off**, **Low**, **Middle** or **High** to suit your preference and press **OK**.

NOTE: If the picture mode is set to **Game** or **PC**, this feature is not available.

DNR – Digital Noise Reduction

DNR *allows you to "soften" the screen representation of a weak signal to reduce the noise effect.*

1 Select **DNR** from the **Noise Reduction** menu.

2 Press ▲ / ▼ to select **Off**, **Low**, **Middle**, **High** or **Auto** and press **OK**. The differences may not always be noticeable (for the best result use lower settings as picture quality can be lost if the setting is too high).

NOTE: If the picture mode is set to **Game** or **PC**, this feature is not available.

Resolution +

*The **Resolution+** feature allows you to adjust the clarity levels for your desired picture settings.*

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Resolution+** and press **OK**.

2 Press ▲ / ▼ to select **On**.

NOTE:
• This feature may not work properly depending on the content.
• Noise may appear in the picture depending on the device connected to the TV (e.g. a device with a specific enhancer function).

ClearScan

This feature helps to eliminate video shaking.

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **ClearScan** and press **OK**.

2 Press ▲ / ▼ to select **High**, **Middle**, **Standard** or **Off**.

Resetting the advanced picture settings

This feature allows you to reset the current **Advanced Picture Settings** *to the default values.*

1 In the **Advanced Picture Settings** menu, press ▲ / ▼ to select **Reset**.

2 Press **OK**.

Expert Picture Settings

This feature is available when the Picture Mode option is **Standard***,* **Movie Day***,* **Movie Night***, or* **Movie Pro***.*

Test Pattern

When the test pattern is on screen, you can navigate in the Picture submenus and adjust picture settings without removing the image.
When you move to a non-Picture menu, or close the menus, regular video will be restored.

1 In the **Picture** menu, press ▲ / ▼ to select **Expert Picture Settings** and press **OK**.

2 Press ▲ / ▼ to select **Test Pattern** and press **OK**.

3 Press ▲ / ▼ to select **On** and press **OK**.

RGB Filter

This feature individually enables or disables the red, green, and blue components of the picture to allow for more accurate adjustment of each colour.

1 In the **Expert Picture Settings** menu, press ▲ / ▼ to select **RGB Filter** and press **OK**.

2 Press ▲ / ▼ to select **Red**, **Green** or **Blue** to adjust and press **OK**.

3 Press ▲ / ▼ to select **On** and press **OK**.

4 Press ▲ / ▼ to select **Colour** or **Tint** and press ► and ◄ / ► to adjust.

5 Press **OK**.

NOTE: It is not possible to turn off all three colours simultaneously.

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Colour Decoding

If you view DVDs with this TV, the Colour Decoding option may be set to ensure the colourimetry reproduction.

NOTE: The modes excluding **Auto** (**BT.709** and **BT.601**) are to convert an irregular signal output from the DVD etc. with incorrect colour to the optimum state. If **BT.709** or **BT.601** is selected with a normal signal received, the colour may not be correctly displayed. This feature should normally be set to **Auto**.

1 In the **Expert Picture Settings** menu, press ▲ / ▼ to select **Colour Decoding** and press **OK**.

2 Press ▲ / ▼ to select **Auto**, **BT.709** or **BT.601** and press **OK**.

White Balance-Window Display

This feature displays a special Window Pattern to be used when adjusting white balance with a measuring device.

1 In the **Expert Picture Settings** menu, press ▲ / ▼ to select **White Balance** and press **OK**.

2 Press ▲ / ▼ to select **Window Display** and press ▶ and ▲ / ▼ to select **On** and press **OK**.

White Balance-Setting Type

You can choose from two types of White Balance adjustment.

1 In the **Expert Picture Settings** menu, press ▲ / ▼ to select **White Balance** and press **OK**.

2 Press ▲ / ▼ to select **Setting Type** and press **OK**.

3 Press ▲ / ▼ to select **2P** or **10P** and press **OK**.

White Balance-2P White Balance

1 Press ▼ to select **2P White Balance** and press **OK**.

2 Press ▲ / ▼ to select **Red-Offset**, **Green-Offset**, **Blue-Offset**, **Red-Gain**, **Green-Gain**, or **Blue-Gain**.
A white square will appear on the screen.

3 Press ▶ and ◄ / ▶ to adjust and press **OK**.

White Balance-10P White Balance

1 Press ▼ to select **10P White Balance.**

2 Press ▲ / ▼ to select **IRE**, **Red**, **Green**, or **Blue**.

3 Press ▶ and ▲ / ▼ to adjust and press **OK**.

NOTE: The adjustments made for Red / Green / Blue are stored separately for each IRE setting. (There are ten IRE settings from 10 to 100.)

Gamma Calibration

NOTE: When the picture mode is set to **Movie Pro**, this feature is available.

Toshiba has integrated picture calibration systems into its LCD televisions. Now you can enjoy the benefits of automatically calibrated gamma and white levels.

In order to take advantage of these features the Toshiba colour analyzer TPA-1 is required.

1 In the **Expert Picture Settings** menu, press ▲ / ▼ to select **Gamma Calibration** and press **OK**.

2 Press ▲ / ▼ to select **Apply Calibration** and press ▶ and ▲ / ▼ to select **Enabled** and press **OK**.

3 Press ▲ / ▼ to select **Auto Gamma Calibration** and press **OK**.

4 Connect the USB colour analyzer to the USB 1 or USB 2 port.

5 Input the target value and place the USB colour analyzer over the square on screen.

Auto Gamma Calibration		
Please input the target value and place the USB colour analyser over the square.		
	x	y
Target Colour Temperature	0.313	0.329 (D65)
Target Gamma	2.4	
	Start	Reset
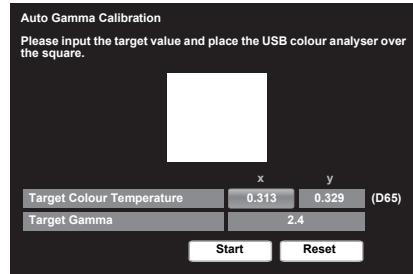
6 Highlight **Start** and press **OK**.

Auto Gamma Calibration will start.

Please wait until you see "Auto Gamma Calibration has been completed." on screen.

To return to factory setting

1 Highlight **Reset** and press **OK**.

Automatic Format (Widescreen)

*When this television receives a true Widescreen picture and **Auto Format** is **On**, it will automatically be displayed in Widescreen format irrespective of the television's previous setting.*

❶ Press ⚲ and ▲ / ▼ to highlight **Picture** icon.

❷ Press ▶ and ▲ / ▼ to select **Display Settings** and press **OK**.

❸ Press ▲ / ▼ to select **Auto Format** and press **OK**.

❹ Press ▲ / ▼ to select **On** or **Off** and press **OK**.

< Display Settings	
Auto Format	On ▶
4:3 Stretch	Off
Picture Position	
PC Settings	
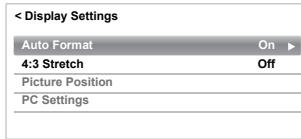
4:3 Stretch

*When **4:3 Stretch** is activated, the size switching system changes 4:3 programmes into full screen picture.*

❶ In the **Display Settings** menu, press ▲ / ▼ to select **4:3 Stretch** and press **OK**.

❷ Press ▲ / ▼ to select **On** or **Off** and press **OK**.

Picture Position

The picture position may be adjusted to suit personal preference and can be particularly useful for external inputs.

NOTE: The **Picture Position** feature cannot be selected on DTV or PC Inputs.

❶ In the **Display Settings** menu, press ▲ / ▼ to select **Picture Position** and press **OK**.

❷ Press ▲ / ▼ to select an option and press ▶ and ◀ / ▶ to adjust the settings and press **OK**.

The options differ depending on the currently selected widescreen format and the input signal.

< Picture Position	
Horizontal Position	0 ▶
Vertical Position	0
Reset	
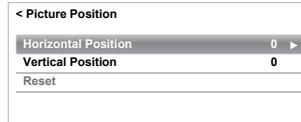
To return to the original factory settings, select **Reset** in the **Picture Position** menu and press **OK**.

Picture still

This feature is used to hold a still image on the screen.

❶ Press ▼ to hold an image on the screen, and press ▼ again to cancel.

HDMI Information Display

*When the **HDMI Information Display** feature is **On** and you are watching an HDMI input source, pressing ⓘ＋ displays the HDMI signal information banner.*

❶ In the **Options** menu, press ▲ / ▼ to select **HDMI Information Display** and press **OK**.

❷ Press ▲ / ▼ to select **On**.

HDMI signal information is as follows: Resolution, Scan Type, Frame Rate, Aspect, Bit Depth, Colour Space, RGB/YUV, Chroma Format, and 3D Structure (if available).

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Wireless LAN Information

Bluetooth™ and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth™ and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off either your Bluetooth™ or Wireless LAN device.

Actual performance can vary, including lower wireless network capacity, data throughput rate, range and coverage. Performance depends on many factors, conditions and variables, including distance from the access point, volume of network traffic, building materials and construction, operating system used, mix of wireless products used, interference and other adverse conditions.

Wireless LAN and your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices, however, is far less than the electromagnetic energy emitted by wireless devices such as mobile phones.

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safely used by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organisation. Such restrictions may apply in environments where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies to the use of wireless devices in a specific organisation or environment, you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

When using the TV under wireless LAN environment:

NOTE:
• When Encryption is set to "None", data transmitted over a wireless LAN is not securely protected. Unauthorized users may access your data and network without appropriate security measures. Selecting an encryption setting from your Toshiba TV and using a secure network for wireless LAN transmissions may help avoid unauthorized access to your important data and/or TV. Toshiba disclaims any and all responsibility or liability resulting from any wireless transmissions over the Internet through your Toshiba TV.

• The function of all IEEE 802.11 is not supported.

• The ad-hoc mode is not supported.

• It is recommended to use IEEE 802.11a or IEEE 802.11n on 5 GHz for audio and SD video streaming.

• It is recommended to use IEEE 802.11n on 5 GHz for HD video streaming.

• It is recommended that the encoding rate for streaming video content is 20 Mbps or less.

• It is not recommended to use 2.4 GHz for audio and video streaming.

• Content playback may be interrupted by various surrounding interference.

Setting up the Network

You can select the Network Type.

❶ Press ✎ and ▲ / ▼ to highlight **Network** icon.

❷ Press ▶ and ▲ / ▼ to select **Network Setup** and press **OK**.

```
< Network
Network Setup                          ▶
Network Device Setup
```
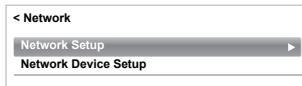
❸ Press ▲ / ▼ to select **Connection Type** and press ▶ and ▲ / ▼ to select **Wired** or **Wireless**.

```
< Network Setup
Connection Type          Wireless ▶   Wired
Wireless Setup                        Wireless
Advanced Network Setup
Network Connection Test
```

❹ If you selected **Wired**, see "Advanced Network Setup" on page 44.

NOTE: After you change between **Wireless** and **Wired**, switch off and on AC power supply to reset your TV. Communication may be impossible after the change of **Wireless** / **Wired**.

Wireless Setup

NOTE: Continued connection of AP (Access Point) is not guaranteed. The connection may be disconnected while watching TV.

There are 3 methods for Wireless Setup
Easy Setup (WPS)

If the AP supports WPS, this method can be used.
• WPS is an industry standard designed to make connection of wireless LAN equipment and security setup easy. WPS will automatically configure all wireless settings.

NOTE: WEP encryption may not be able to configured by easy setup.

Assisted Setup (setup by using the AP's notification information)

Network Name, Authentication, and Encryption are decided based on information from the AP. You will manually set the Security Key.

Manual Setup (manual input of all settings)

Easy Setup using PBC (Push Button Configuration)

❶ In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

❷ Press ▲ / ▼ to select **Wireless Setup** and press **OK**.

❸ Press ▲ / ▼ to select **Easy Setup** and press **OK**.

```
< Wireless Setup
Easy Setup                             ▶
Assisted Setup
Manual Setup
```
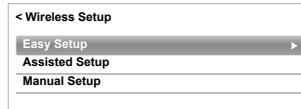
❹ Press ▶ and ▲ / ▼ to select **PBC**.

❺ Press ▼ to highlight **Start Scan** and press **OK**.

❻ Following the on-screen instructions, push the appropriate button on your AP.

❼ When a window reporting that the setup is complete appears, press **OK**.

Easy Setup using PIN (Personal Identification Number)

❶ In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

❷ Press ▲ / ▼ to select **Wireless Setup** and press **OK**.

❸ Press ▲ / ▼ to select **Easy Setup** and press **OK**.

❹ Press ▶ and ▲ / ▼ to select **PIN**.

❺ Press ▼ to select **Start Scan** and press **OK**.

❻ Press ▲ / ▼ to select the desired AP and press **OK**.

   NOTE: Check the Network Name and/or MAC address on the label of the AP or in the manual, and select your AP.

❼ When the PIN code window appears, enter the displayed PIN into your AP, and then press **Next** to continue the PIN Setup. When a message displays to report that the setup is complete, press **OK**.

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To cancel searching for the AP:

Press **BACK** while searching for the AP. A message will appear, and then press ◄ / ► to select **Yes** and press **OK**.

Assisted Setup

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Wireless Setup** and press **OK**.

3 Press ▲ / ▼ to select **Assisted Setup** and press **OK**.
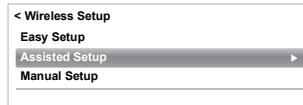
```
< Wireless Setup
  Easy Setup
  Assisted Setup                    ►
  Manual Setup
```

4 Press ▲ / ▼ to select the desired AP and press **OK**.

NOTE: Check the MAC address on the label of the AP or in the manual, and select your AP.

5 Highlight **Security Key** and press **OK**. The Software Keyboard window will appear.

6 Input the Security Key by using the Software Keyboard (see page 46). To save your setting, press the **GREEN** button.

NOTE:
• The Security Key must adhere to these conditions:
  - TKIP/AES: 8-63 ASCII or 64 Hex characters
  - WEP: 5 or 13 ASCII or 10 or 26 Hex characters
• There is only one key ID to set for WEP encryption.

7 Highlight **Done** and press **OK**.

NOTE: If **Network Name** is not displayed, see step 4 and 5 in **Manual Setup** to set **Network Name** before pressing **Done**.

NOTE: Settings are not saved if **BACK** is pressed before **Done** is selected.

Manual Setup

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Wireless Setup** and press **OK**.

3 Press ▲ / ▼ to select **Manual Setup** and press **OK**.

4 Press ▲ / ▼ to select **Network Name** and press **OK**. The Software Keyboard window will appear.

5 Input the Network Name by using the Software Keyboard (see page 46). To save your setting, press the **GREEN** button.

6 Press ▲ / ▼ to select **Authentication** and press ► and ▲ / ▼ to select **Open System**, **Shared Key**, **WPA-PSK** or **WPA2-PSK**.

7 Press ▲ / ▼ to select **Encryption** and press ► and ▲ / ▼ to select **None**, **WEP**, **TKIP** or **AES**.

NOTE:
• Certain encryption types are only compatible with specific authentication types.
  - When Authentication is Open System, only WEP or None is compatible.
  - When Authentication is Shared Key, only WEP or None is compatible.
  - When Authentication is WPA-PSK or WPA2-PSK, only TKIP or AES is compatible.
• When incompatible Authentication/Encryption pairings are detected, a warning message will be displayed, and no connection attempt will be made until the incompatibility is resolved.
• There is only one key ID to set for WEP encryption.

8 Press ▲ / ▼ to select **Security Key** and press **OK**.

9 Input the Security Key by using the Software Keyboard (see page 46). To save your setting, press the **GREEN** button.

NOTE: This item is greyed out when **Encryption** is **None**.

10 Highlight **Done** and press **OK**.

NOTE: When **Encryption** is **None**, a message will appear. Press ◄ / ► to select **Yes** and press **OK**.

NOTE: Settings are not saved if **BACK** is pressed before **Done** is selected.

Wireless Information

The settings configured in Wireless Setup can be confirmed.

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **Wireless Information** and press **OK**.

Quick Menu	
Intel® WiDi	
Picture Mode	Standard
Picture Size	Wide
3D Settings	
More Information	
Channel Options	
Sleep Timer	
HDMI CEC Device Control	
Speakers	TV Speakers
Headphone Level	30
Wireless Information	
Recording Information	
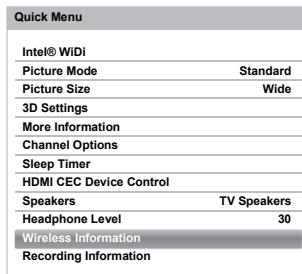
3 When the **Network Type** is **Wireless**, a Wireless Information window will appear.

NOTE: Press the **RED** button to scan for all APs.

Item	Description
Status	**Connected** is displayed when the TV is connected with the AP. **Disconnected** is displayed when the TV is not connected with the AP.
Signal	Connection signal strength with AP (**STRONG**/**MEDIUM**/**WEAK**)
Speed	Link with AP
Mode	Working mode (11a, 11b, 11g, 11n)
Channel	Channel is displayed.
Network Name	SSID set
Authentication	Authentication set
Encryption	Encryption set
Security Key	Security Key set
AP MAC Address	The AP's MAC address is displayed when the TV is connected with the AP.
TV MAC Address	The MAC address of the TV(Wireless) is displayed.
DHCP	**Enabled** is displayed when using DHCP. **Disabled** is displayed when not using DHCP.
IP Address	The TV's IP address
Subnet Mask	Value of the Subnet Mask
Default Gateway	Address of the Default GATEWAY
DNS	Address of the DNS

NOTE: Even if an AP for IEEE 802.11n is used when **Encryption** is set to **WEP** or **TKIP**, the Speed value might be low. It is recommended that **Encryption** be changed to **AES** (see "Manual Setup" on page 42).

Notes on wireless LAN environment

• The function of all IEEE 802.11 is not supported.

• The ad-hoc mode is not supported.

• It is recommended to use IEEE 802.11a or IEEE 802.11n on 5 GHz for audio and SD video streaming.

• It is recommended to use IEEE 802.11n on 5 GHz for HD video streaming.

• It is recommended that the encoding rate for streaming video content is 20 Mbps or less.

• It is not recommended to use 2.4 GHz for audio and video streaming.

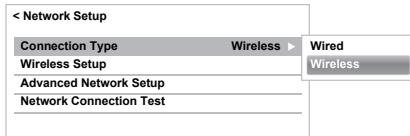• Content playback may be interrupted by various surrounding interference.

Advanced Network Setup

NOTE:
• When the DHCP function of the router connected with this TV is On, you can set **Auto Setup** to **On** or **Off**. (This should usually be set to **On**.)
• When the DHCP function of the router is Off, set **Auto Setup** to **Off**, and set the IP Address manually.

IP Address Setup

Auto Setup

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Advanced Network Setup** and press **OK**.

< Network Setup	
Connection Type	Wireless
Wireless Setup	
Advanced Network Setup	▶
Network Connection Test	

3 Press ▲ / ▼ to select **IP Address Setup** and press **OK**.

< Advanced Network Setup
IP Address Setup ▶
DNS Setup
MAC Address

4 Highlight **Auto Setup** and press ▶ and ▲ / ▼ to select **On**.

IP Address Setup			
Auto Setup	On	▶	On
IP Address	. . .		Off
Subnet Mask	. . .		
Default Gateway	. . .		

NOTE: Other items will be greyed out when **Auto Setup** is set to **On**.

Manual Setup

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Advanced Network Setup** and press **OK**.

3 Press ▲ / ▼ to select **IP Address Setup** and press **OK**.

4 Highlight **Auto Setup** and press ▶ and ▲ / ▼ to select **Off**.

IP Address Setup			
Auto Setup	Off	▶	On
IP Address	xxx . xxx . xxx . xxx		Off
Subnet Mask	xxx . xxx . xxx . xxx		
Default Gateway	xxx . xxx . xxx . xxx		

5 Press ▲ / ▼ to select **IP Address**.

6 Press ◀ / ▶ to highlight the field you want to change, and then use the number buttons to input the IP address. To save the setting, press **OK**.

NOTE: IP address field numbers must be between 0 and 255. After each field number has been set, press **OK** to store the entire address. If the entire IP Address is invalid, a warning message will appear after **OK** is pressed.

7 Press ▲ / ▼ to select **Subnet Mask**, and edit in the same way as IP Address.

IP Address Setup	
Auto Setup	Off
IP Address	xxx . xxx . xxx . xxx
Subnet Mask	xxx . xxx . xxx . xxx
Default Gateway	xxx . xxx . xxx . xxx
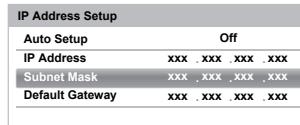
8 Press ▲ / ▼ to select **Default Gateway**, and edit in the same way as IP Address.

NOTE: If you manually set the IP address, you must not use the same IP address for any other device. The IP address you use should be a private address.

DNS Setup

NOTE: When the DHCP function of the router connected to this TV is Off, set Auto Setup to Off, and manually set the DNS address (es). Your internet service provider should have provided these to you.

Auto Setup

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Advanced Network Setup** and press **OK**.

3 Press ▲ / ▼ to select **DNS Setup** and press **OK**.

4 Press ▲ / ▼ to highlight **Auto Setup** and press ▶ and ▲ / ▼ to select **On**.

NOTE: Other items will be greyed out when **Auto Setup** is set to **On**.

Manual Setup

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Advanced Network Setup** and press **OK**.

3 Press ▲ / ▼ to select **DNS Setup** and press **OK**.

4 Press ▲ / ▼ to select **Auto Setup** and press ▶ and ▲ / ▼ to select **Off**.

DNS Setup			
Auto Setup	**Off** ▶	**On**	
Primary DNS Address	xxx . xxx . xxx . xxx	Off	
Secondary DNS Address	xxx . xxx . xxx . xxx		
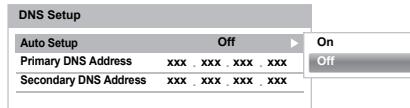
5 Press ▲ / ▼ to select **Primary DNS Address**.

6 Press ◀ / ▶ to highlight the field you want to change, and then use the number buttons to input the Primary DNS Address. To save the setting, press **OK**.

NOTE: DNS address field numbers must be between 0 and 255. If you input an incompatible number and press **OK**, the field number will reset to the maximum value (255).

7 Press ▲ / ▼ to select **Secondary DNS Address**, and edit in the same way as Primary DNS Address.

MAC Address

You can view the fixed MAC address for the TV (Wired and Wireless).

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Advanced Network Setup** and press **OK**.

3 Press ▲ / ▼ to select **MAC Address** and press **OK**.

Network Connection Test

This function checks the Internet connectivity.

1 In the **Network** menu, press ▲ / ▼ to select **Network Setup** and press **OK**.

2 Press ▲ / ▼ to select **Network Connection Test** and press **OK**.

A message will appear to indicate if the connection was successful or if it could not be completed.

NOTE: The result of Network Connection Test does not always guarantee the connection.

To cancel the Network Connection Test:

1 Press **EXIT** while testing.

Using the software keyboard

You can enter text by using the Software Keyboard. The Software Keyboard window will appear when you press OK on a field that accepts character input.

To enter text using the software keyboard:

1 Highlight the desired character on the on-screen software keyboard.

2 Press **OK**.

3 Repeat steps 1 and 2 until you have entered all desired text.

4 Press the **GREEN** button to save your settings and return to the previous screen.

> **NOTE:** If **BACK** is pressed, changes are not saved and the software keyboard window is closed. The text will remain as it was before starting the keyboard.
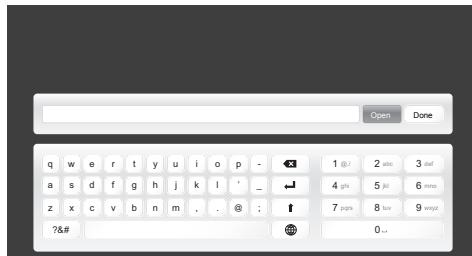
Input operation on the remote control:

Button	Description
OK	Inputs the selected character.
0-9	Selects a character for entry.
▲▼◄ ►	Moves the character highlight.
RED	Deletes 1 character to the left of the cursor.
GREEN	Functions as "Done".
YELLOW	Functions as "Shift" key.
BLUE	Displays the help window.
BACK	Closes the Software Keyboard window without saving changes.

Network Device Setup

Apps Control Profile

Toshiba Apps allow you to control the TV from a network connected tablet or smartphone (availability is dependent on country).

In order to use this function, the **Setting up the Network** *(see page 41) and* **Device Name Setup** *(see page 47) are required. The Device Name will display on the screen of Apps (tablet or smartphone) application.*

New Device Detection

1 In the **Network** menu, press ▲ / ▼ to select **Network Device Setup** and press **OK**.

2 Press ▲ / ▼ to select **External Control Setup** and press **OK**.
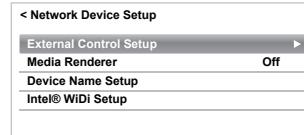
3 Press ▲ / ▼ to select **Apps Control Profile** and press **OK**.

4 Press ▲ / ▼ to select **New Device Detection** and press ► and ▲ / ▼ to select **Enabled**.
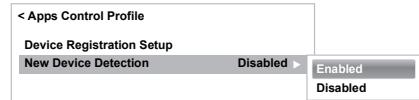
Pairing

To use Apps, it is necessary to connect a compatible tablet or smartphone and this TV to your home network, and carry out pairing (using a 4 or 8 digit password to authenticate the device).
Refer to the Apps manual for more details about pairing.

NOTE:
• Pairing with external devices cannot be carried out when the TV is connected to an unencrypted wireless LAN access point. Activate the encryption settings for the wireless LAN access point before carrying out Pairing.
• When the **Enable Control** is not set to **ON** in **External Control Setup**, Apps functions including Pairing cannot be used.

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Device Registration Setup

Once a User Name has completed authentication, it is stored in the TV along with the password. The upper limit for the number of Use Names that can be remembered is 20. You can delete User Names that are stored in the TV.

1 In the **Network** menu, press ▲ / ▼ to select **Network Device Setup** and press **OK**.

2 Press ▲ / ▼ to select **External Control Setup** and press **OK**.

3 Press ▲ / ▼ to select **Apps Control Profile** and press **OK**.

4 Press ▲ / ▼ to select **Device Registration Setup** and press **OK**.
The **Device Registration Setup** screen will appear and the list of **Companion Device ID** managed by the TV will be displayed.

5 Press ▲ / ▼ to highlight the **Companion Device ID**.

6 Press ▶ and ▲ / ▼ to select the **Cancel, All**, or **Delete** buttons and press **OK**.

NOTE: When re-registering a device which has been deleted from the list, registration must be carried out again.

TV Power On Control (Active Standby)

When the TV is connected to the home network via Wireless LAN, with the TV Power On Control in Enabled, your TV can be turned on by control from Apps.

1 In the **Options** menu, press ▲ / ▼ to select **Power Management** and press **OK**.

2 Press ▲ / ▼ to select **TV Power On Control** and press ▶ and ▲ / ▼ to select **Enabled** (Active Standby).

NOTE:
• Depending on the device connected to the home network, it may take a while for the TV to turn on.
• Depending on the device connected to the home network, this feature may not work.
• If the unencrypted Wireless Setup is done, this feature can not be used.
• The power consumption during Active Standby is more than it during Normal Standby.
• After the change from Power On state to Active Standby, there may be a period of several ten seconds which does not receive the operation from a remote control or external apparatus.

Media Renderer Setup

The TV can be configured as a media renderer. When operating as a media renderer, the TV displays content provided by a media server. The selection of the media is done by media controller. The TV can play photo, movie, or audio files when operating as a media renderer.

1 In the **Network** menu, press ▲ / ▼ to select **Network Device Setup** and press **OK**.

2 Press ▲ / ▼ to select **Media Renderer** and press ▶ and ▲ / ▼ to select **On**.

If request comes from media controller, prompt will appear and the Media Renderer function will start.

To exit the Media Renderer:

Press **EXIT**.

Terminology

DMS: Digital Media Server

DMR: Digital Media Renderer

DMC: Digital Media Controller

NOTE: You cannot use 3D function in operating as a media renderer.

Device Name Setup

The TV's device name can be changed.

1 In the **Network** menu, press ▲ / ▼ to select **Network Device Setup** and press **OK**.

2 Press ▲ / ▼ to select **Device Name Setup** and press **OK**.
The Device Name Setup screen will appear.

3 Press ▲ / ▼ to select **Device Name** and press **OK**. The Software Keyboard window will appear.

4 Input the Device Name by using the software keyboard (see page 46). To save your setting, press the **GREEN** button.

NOTE:
• The Device Name can be up to 15 characters long.
• Only the 0-9, - and A-Z (uppercase only) characters may be used for the device name.

5 Press ▼ to highlight **Done** and press **OK** to save your setting.

USB HDD Record Function

This function can be used to record and play digital broadcast programmes (function is dependent on country selection). Read the precautions below before recording or viewing programmes using the USB HDD record function.

NOTE:
• In order to use this function, a USB HDD needs to be connected to the TV. Do not use USB Hub.

• After recording operation, time may take to a recording start.

• Recorded programmes saved on the USB HDD can only be viewed on this TV. They cannot be viewed when connected to another TV (including the same model of TV), a PC, or other device.

• You cannot watch other channel while recording one channel.

• If the recording time to the USB HDD is too short, no data may be saved.

• You cannot record video input signals on the USB HDD.

• Not all types of broadcast may be recordable.

• After programming the TV to record digital broadcasting, do not disconnect the power plug before recording starts.

• Should video or audio recording fail due to malfunction of the TV or poor reception, no compensation would be paid.

• If there is a power failure or the power plug is disconnected during programmed recording, recording will stop and will not resume when the power returns or the plug is reconnected.

• Any changes implemented by the broadcasting station may affect programme scheduling.

• Scheduling of multiple consecutive programmes may result in the beginning of each programme not being recorded.

• Accurate start / finish time for recording is reliant on broadcasters maintaining correct time stamp if this not the case the recording will fail.

• Some broadcasters can control whether a program can be recorded or how long you may be able to view it for after recording, and inform you with the on-screen message when the time limit for viewing the program has lapsed.

• Programmed recording cannot take place if the power plug is not connected.

• Disconnecting the power plug during recording may result in failure to save the recorded programme.

• When the USB HDD is formatted, all the data stored on the HDD will be erased.

Setting up the USB HDD for recording

To connect a USB HDD (not supplied):

USB1 or USB2 on the TV

USB cable (not supplied)
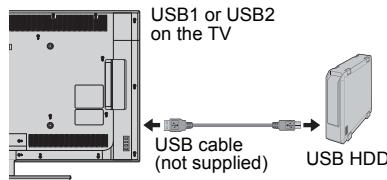
USB HDD

1 Press ◀ / ▶ to select **No** and press **OK**.

NOTE: Not guaranteed to work with all USB HDD.

To record DTV programmes (One Touch Recording)

To record the programme currently being viewed.

1 Press the ●**REC** button on the remote control. The currently viewed programme will start to be recorded.

To stop recording:

1 Press the ■ (stop) button. A confirmation window "Do you want to stop Recording?" will appear.

2 Press ◀ / ▶ to select **Yes** and press **OK**. Recording will stop.

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How to set recordings via the Programme Guide

Programmed recording can be scheduled easily using the Programme Guide or by specifying the date and time.

PLEASE NOTE

When a timed programme is about to start, an information screen will appear offering the option of watching or cancelling the programme. Other channels will not be available during the timed programme unless the programme timer is cancelled.

It will only be possible to create or edit programme timers for the currently tuned DTV input.

Using the Programme Guide to set future recordings

1 Press **GUIDE** on the remote control to display the Electronic Programme Guide (EPG).

2 Press ▲▼◄► to highlight the programme you want to record and press **OK**.

3 The **Edit Timer** screen will appear. Press ▲ / ▼ to select **Timer Type**.

Edit Timer	10:50 Tue, 26 Apr
The Daily Politics	
2 CABC Channel	
11:30 - 12:30 Tue, 26 Apr	
Timer Type	Recording
Set Timer	Delete Timer

4 Press ► and ▲ / ▼ to select **Recording** and press **OK**.

5 Press ▲ / ▼ to highlight **Set Timer** and press **OK**.

To search for and record a programme using Genre Search:

1 Press the **YELLOW** button on the remote control to access the **Genre Search** screen.

Genre Search			5:48 Tue, 22 Apr
▤ Movie ►			
34 AB1	Hard Rain	Wed,27 Apr	0:15-1:45
31 PARIS PREMIERE	Red Corner	Wed,27 Apr	22:15-23:55
11 NT1	The Lawnmower Man	Thu,28 Apr	1:20-3:00
9 W9	A Vow to Kill	Fri,29 Apr	1:30-3:00
34 AB1	Parenthood	Sat,30 Apr	0:45-2:40
11 NT1	Body and Soul	Sat,30 Apr	1:15-3:00
31 PARIS PREMIERE	The Nun's Story	Sat,30 Apr	15:00-17:30
9 W9	Red Corner	Sat,30 Apr	23:20-1:15
11 NT1	The Real Blonde	Sun,1 May	0:40-2:00
31 PARIS PREMIERE	Critters	Sun,1 May	0:40-2:20
11 NT1	Indiana Jones and the Temple of Doom	Sun,1 May	21:10-23:20
11 NT1	The jackal	Sun,1 May	23:20-1:15
34 AB1	Coup De Ville	Mon,2 May	1:10-3:00

2 Press ◄ / ► to select the genre. Programmes listed will change for the new genre. Press ▲ / ▼ to select the programme for which you want to schedule recording.

3 Press **OK**. The **Edit Timer** screen will appear. Press ▲ / ▼ to select **Timer Type**.

Edit Timer	10:50 Tue, 26 Apr
The Daily Politics	
2 CABC Channel	
11:30 - 12:30 Tue, 26 Apr	
Timer Type	Recording
Set Timer	Delete Timer

4 Press ► and ▲ / ▼ to select **Recording** and press **OK**.

5 Press ▲ / ▼ to highlight **Set Timer** and press **OK**.

To programme the timer:

❶ Press the **BLUE** button on the remote control.

❷ Select the unprogrammed column (blank column) and press **OK**.
The **Edit Timer** screen will appear.
Press ▲ / ▼ to select **Timer Type**.
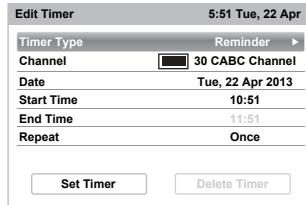
Edit Timer	5:51 Tue, 22 Apr
Timer Type	Reminder ▶
Channel	▭ 30 CABC Channel
Date	Tue, 22 Apr 2013
Start Time	10:51
End Time	11:51
Repeat	Once
Set Timer	Delete Timer

❸ Press ▶ and ▲ / ▼ to select **Recording** and press **OK**.

❹ Press ▲ / ▼ to go through the list adding the details of the programme by using the number buttons and ◀ / ▶ to make selections.

- **Channel**
  Select the channel you wish to record.

- **Date**
  Select the date that you wish recording to start.

- **Start Time**
  Select the time to start recording.

- **End Time**
  Select the time to end recording.

- **Repeat**
  Select "**Once**", "**Daily**" or "**Weekly**".

Once	The selected content is recorded once.
Daily	The same time slot on the same channel is recorded every day on and after the selected day.
Weekly	The same time slot on the same channel on the same day of the week is recorded on and after the selected day.

❺ Press ▲ / ▼ to highlight **Set Timer** and press **OK**.

To schedule a programme using the information screen:

❶ Press ⟨i+⟩, the information screen will appear giving details of the channel and programme currently being viewed.

▭ 4 CHANNEL Z	◀▪ ▪	6:00 Thu, 11 Oct

▥ D+ ⟨⟩ 𝒥AD **English**

3D⇌2D **Side by Side**

Now	MLB Young's two-run triple leads AL over NL	6:00- 8:00

HD 16:9 ▤ ▭ 𝕢ᵈ AD 18 ᴀᴠ ▭ᴵ News   15 min left

Next	World News and Sports	8:00- 9:00

▦ Change

❷ Press ▲ / ▼ to select **Next** and press **OK**. The **Edit Timer** menu will appear.
Press ▲ / ▼ to select **Timer Type**.

Edit Timer	10:50 Tue, 26 Apr
The Daily Politics	
▭ 2 CABC Channel	
11:30 - 12:30 Tue, 26 Apr	
Timer Type	Recording
Set Timer	Delete Timer

❸ Press ▶ and ▲ / ▼ to select **Recording** and press **OK**.

❹ Press ▲ / ▼ to highlight **Set Timer** and press **OK**.

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To check, edit or delete scheduling information

You can check, edit or delete scheduling information.

1 Press **GUIDE** and then press the **BLUE** button. **Programme Timers** screen will appear.

Recording List

• Depending on the transmitter information, the programme broadcast time or other information may not be correctly displayed in the recording list.
• The programme does not appear in the recording list immediately at the start of recording, but appears a few minutes after recording starts.
• Up to 64 programmes can be displayed in the recording list.
• If the channel settings are changed, the digital channel number, or other information may not appear correctly in the recording list.
• As the displayed programme time is calculated from the actual recording information, it may not match the recording time on the USB HDD.

To check a schedule:

1 Press ▲ / ▼ on the **Programme Timers** screen to check the schedule.

To edit a schedule:

1 Press ▲ / ▼ on the **Programme Timers** screen to select the title whose schedule you want to edit and press **OK**.

The **Edit Timer** screen will appear. Change the settings as required, following the same procedure as for setting the schedule.

2 Press ▲ / ▼ to highlight **Set Timer** and press **OK**.

To delete a schedule:

1 Press ▲ / ▼ on the **Programme Timers** screen to select the title whose schedule you want to delete.

2 Press the **RED** button. Press ◄ / ► in the displayed confirmation window to select **Yes** and press **OK**. The selected schedule will be deleted.

NOTE: You can also delete a schedule by selecting **Delete Timer** from the **Edit Timer** menu for each programming method.

To view a recorded programme

*To view the recorded **Library** screen and select a title from the recorded programme list.*

1 Press 🎞 and highlight **My Recordings** icon and press **OK**. The **Library** screen will appear.
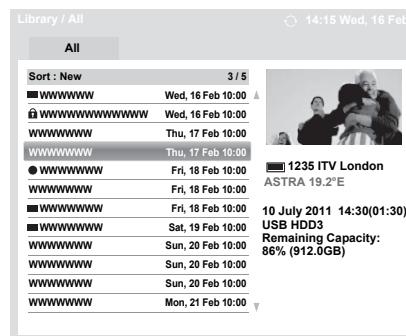
2 Press ▲ / ▼ to select the title you want to view. A preview of the content selected can be seen on the preview screen.

To change the order in which the titles are listed, press the **BLUE** button.

3 Press **OK**. Viewing starts. ● icon appears next to the title currently being recorded. When the title currently being recorded is selected and **OK** is pressed, playback will start from the beginning of the programme currently being recorded.

Operations during viewing

The following operations can be performed using the remote control buttons.

►	To PLAY	►►	To FAST FORWARD
■	To STOP	►►|	To SKIP-FORWARD
II	To PAUSE/STEP	◄►	To shift playback position
|◄◄	To SKIP-BACK		
◄◄	To REWIND		

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Operations from the Library screen

*As well as viewing the list of recorded titles on the **Library** screen, you can protect or delete titles and register titles to Personal Mode.*

To display the Library screen:

1 Press [icon] and highlight **My Recordings** icon and press **OK**. The **Library** screen will appear.

Library / All	14:15 Wed, 16 Feb
All	

Sort : New	3 / 5
WWWWWW	Wed, 16 Feb 10:00
🔒 WWWWWWWWWWWW	Wed, 16 Feb 10:00
WWWWWWW	Thu, 17 Feb 10:00
WWWWWWW	Thu, 17 Feb 10:00
● WWWWWWW	Fri, 18 Feb 10:00
WWWWWWW	Fri, 18 Feb 10:00
■ WWWWWWW	Fri, 18 Feb 10:00
■ WWWWWWW	Sat, 19 Feb 10:00
WWWWWWW	Sun, 20 Feb 10:00
WWWWWWW	Sun, 20 Feb 10:00
WWWWWWW	Sun, 20 Feb 10:00
WWWWWWW	Mon, 21 Feb 10:00

1235 ITV London
ASTRA 19.2°E

10 July 2011 14:30(01:30)
USB HDD3
Remaining Capacity:
86% (912.0GB)

To protect or unprotect a recorded programme:

Protecting a programme prevents it from being accidentally deleted.

Select the title of the programme you want to protect and press the **GREEN** button. 🔒 icon appears next to the title and the programme is protected.

If Protect is set to **On** when the programme is recorded, 🔒 icon appears next to the title of the recorded programme.

When a title with 🔒 icon is selected and the **GREEN** button is pressed, 🔒 icon disappears and the programme is unprotected.

To group the recorded programmes

1 Press the **YELLOW** button. A grouping mode window will appear.

Week: Grouping the recorded programme by the day (Sunday - Saturday)
Genre: Grouping the recorded programme by the genre.

To change the title of recorded programme

1 Press **QUICK** when the Library screen is displayed.

2 Press ▼ to select **Title Edit** and press **OK**. The **Software Keyboard** window will appear.

3 Input your desired title by using the software keyboard (see page 46). Press the **GREEN** button to save your settings.

To delete a recorded programme:

1 Press the **RED** button. Check boxes will appear next to the titles.

2 Press ▲ / ▼ to select the title you want to delete and press **OK**. A check mark will be inserted in the check box.

Library / All	
All	

Sort : New	
☐ WWWWWW	Wed, 16 Fe
🔒 WWWWWWWWWWWW	Wed, 16 Fe
☐ WWWWWWW	Thu, 17 Fe
☑ WWWWWWW	Thu, 17 Fe
☐ WWWWWWW	Fri, 18 Fe
☐ WWWWWWW	Fri, 18 Fe
☑ WWWWWWW	Fri, 18 Fe
☑ WWWWWWW	Sat, 19 Fe
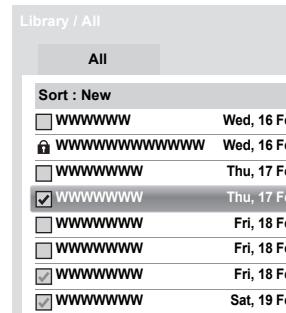
To insert a check mark against all the titles, press the **YELLOW** button.

To uncheck all the check boxes, press the **BLUE** button.

NOTE:
- A check mark will not be inserted against protected titles.
- Note that once deleted, a title cannot be restored.

3 Press the **RED** button.
Select **Yes** in the confirmation window and press **OK**.
All the titles with check marks will be deleted.

USB HDD capacity

You can check the remaining capacity of the USB HDD using **Remaining Capacity**.

Thu, 17 Feb 10:00	
Thu, 17 Feb 10:00	
Fri, 18 Feb 10:00	
Fri, 18 Feb 10:00	**1235 ITV London**
Fri, 18 Feb 10:00	**ASTRA 19.2°E**
Sat, 19 Feb 10:00	
Sun, 20 Feb 10:00	**10 July 2011 14:30(01:30)**
Sun, 20 Feb 10:00	**USB HDD3**
Sun, 20 Feb 10:00	**Remaining Capacity:**
Mon, 21 Feb 10:00	**86% (912.0GB)**

NOTE: The remaining capacity displayed is only a guide; it is not guaranteed.

Recording Setup

You can set your preferences for recording.

To select USB HDD and Partition for Recording:

1 Press ⚙ and ▲ / ▼ to highlight **Options** icon.

2 Press ▶ and ▲ / ▼ to select **Recording Setup** and press **OK**.

3 Press ▲ / ▼ to select **Select Device** and press **OK**. USB HDD and Partition list will be appear. If USB HDD is partitioned by PC, several partitions will be displayed.

< Recording Setup	
Select Device	▶
One Touch Recording Time	120 Minutes
TimeShift Size	4GB
Start Padding Time	None
End Padding Time	None
Device Test	
Format Device	
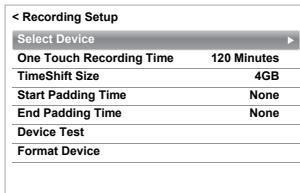
4 Select USB HDD and Partition you want to recording.

To set the recording time for One Touch Recording:

1 Press ⚙ and ▲ / ▼ to highlight **Options** icon.

2 Press ▶ and ▲ / ▼ to select **Recording Setup** and press **OK**.

3 Press ▲ / ▼ to select **One Touch Recording Time** and press ▶ and ▲ / ▼ to select the recording time.

< Recording Setup		Programme End Time
Select Device		30 Minutes
One Touch Recording Time	**120 Minutes** ▶	60 Minutes
TimeShift Size	4GB	90 Minutes
Start Padding Time	None	120 Minutes
End Padding Time	None	150 Minutes
Device Test		180 Minutes
Format Device		210 Minutes
		240 Minutes
		270 Minutes
		300 Minutes
		330 Minutes
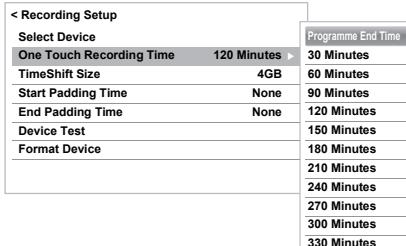
You can set the **Programme End Time** in 30-minute increments in the range of **30 Minutes** to **330 Minutes**.

To select the TimeShift Size:

1 In the **Recording Setup** screen, press ▲ / ▼ to select **TimeShift Size**.

2 Press ▶ and ▲ / ▼ to select **512 MB**, **1 GB**, **2 GB** or **4 GB** and press **OK**.

To use TimeShift recording:

Time Shift recording allows you to pause live TV for a fixed period of time.

For Example: If you move away from the TV for a short period, such as when the phone rings while you are watching TV, you can easily pause live TV and then continue to view from the same point in the programme when you return.

1 Press ❚❚ on the remote control while viewing the DTV programme.
The screen will switch to a still image and recording will start automatically.
The recording time is decided by **TimeShift Size**.
If the TimeShift file size reaches the limit set, then the TV will continue to be paused, but the recording buffer will be reset to the beginning.

2 Press ▶ (play).
Catch-up viewing will start from where the programme was paused.

3 Press ■ (stop) to stop the recording.

To set the padding time for programmed recording start time and end time:

1 In the **Recording Setup** screen, press ▲ / ▼ to select **Start Padding Time**.

2 Press ▶ and ▲ / ▼ to select a time.

You can select from **None**, 3 Minutes, 5 Minutes, 10 Minutes, 15 Minutes, 30 Minutes, and 45 Minutes.

Recording will start at the selected number of minutes prior to the recording start time.

3 Press ▲ / ▼ to select **End Padding Time**.

4 Press ▶ and ▲ / ▼ to select a time.

You can select from **None**, 3 minutes, 5 minutes, 10 minutes, 15 minutes, 30 minutes, and 45 minutes.

Recording will end at the recording end time plus the selected number of minutes.

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To perform a USB HDD operation test:

1 In the **Recording Setup** screen, press ▲ / ▼ to select **Device Test** and press **OK**.

USB HDD operation test will start.
Wait until the test ends.

NOTE: The results of the device test are only a guide. The device may not function as shown in the results.

To format a USB HDD:

1 In the **Recording Setup** screen, press ▲ / ▼ to select **Format Device** and press **OK**.

2 Press ◄ / ► to select **Yes** in the confirmation window that will appear and press **OK**. Formatting will start.
Wait until formatting ends.

NOTE:
• If the USB HDD is separated several partitions by PC and multiple Partition appear on the **Device List** screen, press ▲ / ▼ to select the Partition you want to format.
• When the USB HDD (or Partition) is formatted, all the data stored on the USB HDD (or Partition) will be deleted.

Scheduling priority

If scheduled time slots are next to each other and there is more than one minute between the end time of the first schedule and the start time of the next schedule, programmed recording will be performed correctly.

• When **Start Padding Time** and **End Padding Time** are set (see page 53), the start time and end time will be the time plus the additional minutes.

If scheduling times overlap, priority will be given to the programmed recording which starts first. When the programmed recording that started first ends, recording will switch to the next scheduled programme. At this time, depending on how far the scheduling times overlap, the beginning section of the next scheduled programme may not be recorded.

Using the Cloud TV Service

Toshiba's universal portal for internet content and services.

NOTE: You need to configure a home network before using this feature (see page 13).

1 Press ⌂.
The menu screen of the Cloud TV service will appear.

2 Press ▲▼◄ ► to select a Cloud TV service, and press **OK**.
For the operations of the Cloud TV service, refer to Cloud Guide.

Using Web Browser

The web browser on this TV lets you explore everything the web has to offer. Along with access to popular places, you'll be able to search for and browse your favourite sites.

NOTE:
• Certain services may not be currently available in your area.
• Your registration or login may be required to use some services.
• Third party internet services are not provided by Toshiba, may change or be discontinued at any time and may be subject to Internet service provider restrictions. Toshiba makes no warranties, representations, or assurances about the content, availability or functionality of third-party content or services. Use of third party Internet services may require the creation of a separate account through a computer with Internet access and/or payment of one-time and/or recurring charges and membership.
Not all third party services may be available on or compatible with this product. In order to experience the full suggested capabilities of this product, fully-compatible devices may be required.
  - does not support platform-dependent technologies such as Active X.
  - only supports preinstalled plug-ins.
  - may not support media formats other than the following: JPEG/PNG/GIF.
  - uses a single built-in font. Some text may not be displayed as intended.
  - does not support downloading of files or fonts.
  - is a TV browser. It may work differently than PC browsers.
  - does not support parental control or locks in the content, and it is the responsibility of the you to monitor browser usage by minors.
• Some pages may not be displayed correctly or may display differently on different devices.
• Certain services may not be available in your area.

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To use the web browser

NOTE: You can change the mouse mode (Mouse Emulation or Navigation) by pressing the **GREEN** button on the remote control when the web contents screen is open.

1 Press ⌂ on the remote control and select Internet icon to open the web browser.

2 Press ▲▼◄ ► to select the URL address bar and press **OK**.

3 Enter the desired URL address by using the Software Keyboard (page 46).

Press the **GREEN** button on the remote control.

4 You can now browse websites on your TV using ▲▼◄ ► buttons on the remote control.

To Add Favourites Websites

By adding frequently visited websites to Favourites, you can browse them easily. You can view the addresses of the websites you visited previously.

1 Press ⌂ on the remote control and select Internet icon to open the web browser.

2 Enter the desired URL address by using the Software Keyboard (page 46).

3 Press ▲▼◄ ► to scroll Favourites STAR on the Toolbar and press **OK**.

4 Press **OK** to save the desired website to your Favourites.

5 Press **BACK** on the remote to return to browsing your website.
You can press the **GREEN** button on the remote for thumbnail view of all your Favourites.

NOTE: The desired website is highlighted and displayed on the top row with the + icon. The + icon will change to a page icon after the website has been saved to Favourites.

To browse favourite websites

1 Press ⌂ on the remote control and select Internet icon to open the web browser.

2 Use ▲▼◄ ► to select Favourites STAR and press **OK**.

3 Select the item or folders to move to the desired URL address and press **OK**.

4 You can now browse websites on your TV using ▲▼◄ ► on the remote control.

PIP (Picture-in-picture) function

When viewing the web browser page, currently airing programmes or images from external inputs can be displayed in a PIP window (sub-screen).

1 Press the **RED** button while viewing the web browser page.
The currently airing program or images from external inputs are displayed in a PIP window.

NOTE:
• The position of the PIP window, and whether it is displayed or not can be set in the web browser settings.
• P⌃ and P⌄ buttons cannot be used when the PIP window is displayed.
• Images in the PIP window cannot be displayed in 3D.
• Images from 3D signals will not be displayed in the PIP window.

To stop displaying the PIP window:

Press the **RED** button when the PIP window is displayed.

Using Skype

Skype-ready Toshiba TVs bring your family and friends closer to your home. Skype on your Toshiba TV allows you to share special moments no matter the distance.

Before using Skype - Preparation

• Connect the FREETALK HD Camera: TALK-7291 to the TV's USB terminal. Do not use a USB hub.
  For a Skype-ready Toshiba TV compatible camera, please visit the following website:
  http://shop.skype.com
• Arrange the HD camera on top of the TV, ensuring it's in the centre.
• Connect to the network.

NOTE:
• The HD camera is sold separately.
• Do not connect a camera other than the recommended HD camera.
• Using a wireless network may result in degraded call quality.
• Some of the features available on other versions of Skype are not available on the television.
• When using Skype, some functions of the TV will not be available.
• The sound settings are switched to Skype mode.
• If you cannot hear the person you're speaking with, check your TV volume.
• When Optical Digital output or Analogue output is used and you are signed in, the ring tone may not sound.
• The volume level on Skype may differ from other features on your TV.
• When the Reset TV feature is used from the TV Menu, Skype information is reset to factory default settings.
• Screenshots used in this manual may differ from the TV Menu, Skype will be reset to its factory default settings.

No emergency calls with Skype

Skype cannot be used for emergency calls.

Getting started

1 Press 🔲 on the remote control.

2 Press ▲▼◄► to select **Skype** icon and press **OK**.

"Welcome to Skype" screen appears.

Welcome to Skype	
Skype Name	Press [OK]
Password	Press [OK]
☐ Sign in when Skype starts	
☑ Start Skype when TV starts	
Sign in	Create Account

You can select a Skype name from the Skype Name drop down menu.

3 Select **Sign in** or **Create Account**.

To create a new account:

If you do not already have a Skype account, you can create a new one from your TV.

1 Select **Create Account** in the **Welcome to Skype** screen and press **OK**.

Create new Skype account	
Full Name	1~70 characters
Skype Name	6 and 32 characters
Password	6~20 characters
Repeat Password	6~20 characters
Email	Press [OK]
☐ Yes, send me Skype news and special offers.	
I have read and accept.	
📄 the Skype Terms of Use	
📄 the Skype Privacy Statement	
I agree - create account	Cancel

Create new Skype account	
Full Name	1~70 characters
Skype Name	6 and 32 characters

2 Enter your **Full Name**, **Skype Name**, **Password**, **Repeat password**, and **Email**.

- If you want to receive Skype news and special offers, check the selection box. Skype will inform users about new products, features and special offers by email.

3 Select "**I agree - create an account**" and press **OK**.

4 You'll now be signed into your new account.

NOTE:
- Please ensure that you have entered your email address correctly. It is required in case you lose or forget your password.
- If you forget your password, visit skype.com to retrieve it.
- If a message appears informing you that the entered Skype name is already registered, please choose a different name.

To Sign into Skype:

If you have a Skype account, sign into Skype in the **Welcome to Skype** screen.

1 Enter your **Skype Name** and **Password**.

2 Select **Sign in** and press **OK**.

- If "**Sign in when Skype starts**" is checked, your account will sign in automatically when you launch Skype from the menu.
- If "**Start Skype when TV starts**" is checked, your account will sign in automatically when you turn on the TV.
  Both these options can be selected together.

Basic Operation

Press ▲ / ▼ to select a tab (Contacts/People, Recent, Settings). Press ▶ and ▲ / ▼ to select a contact from the list.
Your contact list will contain the following information:
Contact name / Current online status / Profile picture / Mood message

Your profile picture, status, Skype Name, mood message and available Skype Credit.

Tab
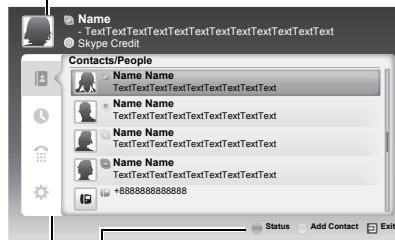
◯ Status: Change your availability status
◯ Add Contact: Add a Skype account or phone number
EXIT: Return to previous screen. When at contact list, the **EXIT** button will close Skype application without sign out.

The current status for each of your contacts are explained below:

✅ : Online	◐ : Away
✕ : Offline	📞 : Phone number
⬛ : Do not disturb	➡ : Offline with voice messaging or call forwarding enabled

Contacts/People

Press ▲ / ▼ to select **Contacts/People** tab. Press ▶ and ▲ / ▼ to select a contact.

When pressing **OK** at each contact, the following functions will appear:

No blocked contactor
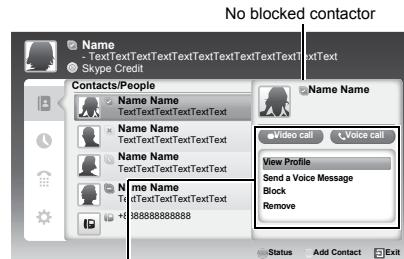
Initiate Video Call
Initiate Voice Call

View Profile	- View contact profile (including Skype name, full name, birth date, gender, location, mobile number and email).
Send Voice Message	- Send Voice Message to contact
Block	- Block / unblock contact
Remove	- Remove contact from list

Video or Voice call

Press ▲▼◄ ► to select **Video call** or **Voice call**, your screen will now display your call as shown below.

Video call

Other side   Own side
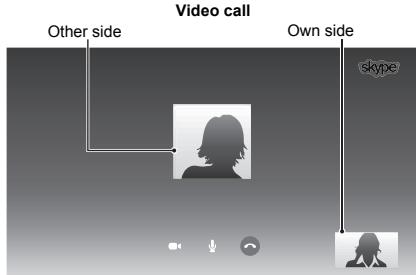
Voice call
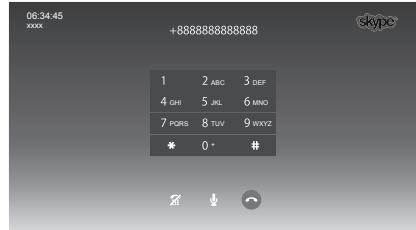
Below is all icon pictures in conversation window.

- Start video
- Stop video
- Resume the call
- Unmute the webcam mic
- Mute the webcam mic
- Normal size video
- Full screen video
- Open dial pad
- End call (Hang up the call)

Group calls

Using your Toshiba TV, you can join Skype group voice and video calls. However, you can only send and receive audio whilst on these calls.

NOTE: You must be invited on to a group call, you cannot initiate it from the TV.

Incoming call

Incoming calls on Skype will be displayed on the bottom right hand corner of your TV screen. You'll also hear a ring tone which can be adjusted using the **VOLUME** buttons on your remote control.
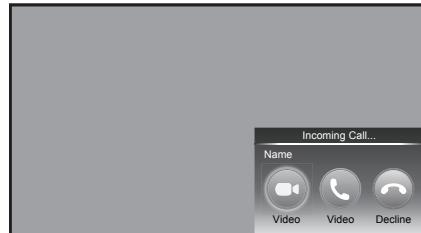
You are given three options when an incoming call arrives:

- **Video** : Answer by video call.
- **Voice** : Answer by voice call.
- **Decline**: Decline the incoming call.

NOTE: If other applications are active or recording, you'll only get an "Incoming call notification" until the application or recording has stopped.

Status

When you press the **GREEN** button, the change status window will appear as below. You can change your status by pressing ▲ / ▼ and **OK**. Press **BACK** to exit.

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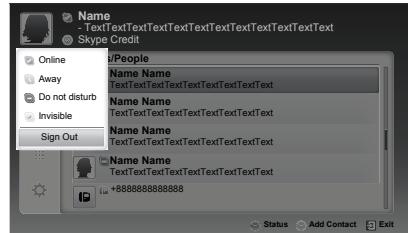
Add Contact

You can add contacts to your list of contacts.

When you press the **YELLOW** button, the **Add Contact Type** menu window will appear.
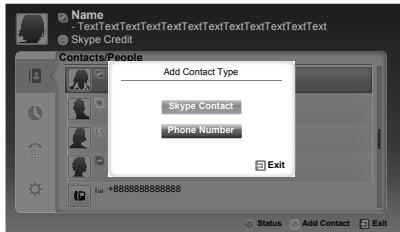
Two sub-functions are supported.

Press ▲ / ▼ to select **Skype Contact** or **Phone Number** and press **OK**.

• **Skype Contact**

Enter the Skype Name of the person you're looking for. The search result will show up after get response from Skype server.

• **Phone Number**

You can also enter a phone number in the search window.

Contact Search Results

You can send a contact request to a person displayed in the search results. Press ▲ / ▼ to select a person and press **OK**.

Notification of authorization request
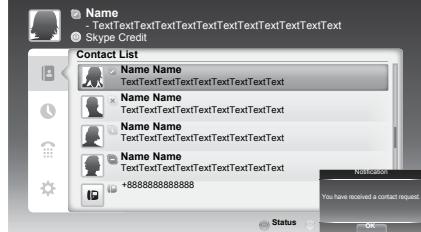
When you receive a contact request, a pop-up menu will appear where you can choose to **Accept**, **Block** or **Decline** the request.

Press ▲ / ▼ to select and press **OK**.
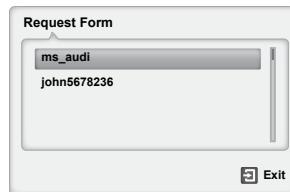
Press ◄ / ► button to select and press **OK**.

Recent 🕐

You can see a list of past events in "Recent".
Press ▲ / ▼ to select the **Recent** tab. Press ► and ▲ / ▼ to select an item and press **OK.**
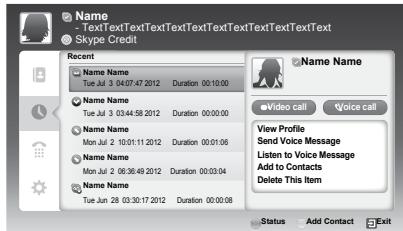
Press ◄ / ► to select **Video call** or **Voice call**.

Each call has an icon with it. The meaning of each icon is as follows:

Icons	Description
📞	Incoming call
📞	Outgoing call
📞	Missed call
📼	Unread Voice Message
📼	Voice message

Dialer 🎛

You can call mobiles and landlines from this screen.

Press ▲ / ▼ to select the **Dialer** tab. Press ▶ and ▲ / ▼ to navigate this screen.
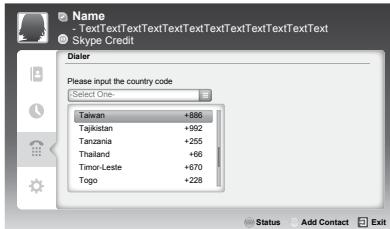
Select the country or region first, and then enter the phone number with area code. You'll need a little Skype Credit in your account to call mobiles or landlines using Skype. Emergency calls over Skype are not supported.

Settings ⚙

Press ▲ / ▼ to select the **Settings** tab and press **OK**.

The Settings window will appear.

You can change the following settings:

- **User Profile**

  Add or change your personal information e.g. birth date, country/region or phone number.

- **Change Password**

  You can change your password by entering your existing password and new password twice.

- **General Settings**

  Select whether Skype should automatically start when turning on the TV.

- **Audio Settings**

  Adjust the speaker / ringtone volume manually.

  The volume of your speakers will be different on Skype compared to your normal TV volume level. The speaker volume range is 0 - 100 % by 1 steps, and ringtone volume is 0 - 100 % by 25 steps.

- **Privacy Settings**

  Set who you allow calls from, whether it's Anyone or People in my Contact list only.

- **Blocked Contacts**

  If you do not want someone to reach you, simply block them by entering their Skype Name or phone number from this menu. Successfully blocked contacts are displayed in this window.

- **Call Settings**

  If you're not signed into Skype, you can forward incoming calls to another phone number or Skype name, or choose to accept voice messages. However you'll need to have Skype Credit to turn this feature on.

- **About Skype**

  Displays information about Skype.

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Using Intel® Wireless Display

Intel® Wireless Display (Intel® WiDi) is supported on this TV. You can use your TV as second display for PC with Intel® Wireless Display.

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **Intel® WiDi** and press **OK**.

A prompt will appear on the screen. Select **Yes**.

3 Launch the Intel® WiDi software on your PC and select "scan for available adaptors".

Intel® WiDi device name and ID list will then be displayed on the PC screen.

Select the TV which you wish to connect to.

"Connecting" will be shown on the TV.

4 **Connecting your PC to your TV the first time**

When selecting the Toshiba TV for the first time, a 4-digit or 8-digit code will appear on your TV screen. This code needs to be inputted into your computer to authenticate the connection.

If authentication has already taken place

"Connected to Intel® WiDi. Please Wait" will appear on screen.

5 After the Intel® WiDi connection is completed, the TV screen will mirror the content shown on the PC screen (depend on PC's settings).

NOTE:
- When connecting Intel® WiDi, PC must have power turned on.
- When the Intel® WiDi software is active, and the Connection Type is set to Wireless, other applications may not be usable.
- Intel® WiDi device name of the TV can be changed from the Intel® WiDi software.

To exit Intel® WiDi:

Exit Intel® WiDi by pushing the disconnect button on Intel® WiDi software or by pressing **EXIT** on the TV remote control.

NOTE: If the PC has been inactive for some time, the Intel® WiDi connection will be disconnected automatically.

Intel® WiDi Device Name

The TV's Intel® WiDi device name can be changed.

1 In the **Network** menu, press ▲ / ▼ to select **Network Device Setup** and press **OK**.

2 Press ▲ / ▼ to select **Intel® WiDi Setup** and press **OK**.

3 Press ▲ / ▼ to select **Intel® WiDi Device Name** and press **OK**.

4 Select **Intel® WiDi Device Name** and press **OK**. The Software Keyboard window will appear.

5 Input the Intel® WiDi device name by using the software keyboard (see page 46). Press the **GREEN** button.

6 Highlight **Done** and press **OK** to save your setting.

Device List

Device List displays a list of MAC addresses for previously connected device that have been connected before. The maximum number that can be stored is 20.

If the list run out of space, the least-recently-used MAC address will be deleted and the new MAC address added automatically.

1 In the **Intel® WiDi Setup** screen, highlight the **Device List** and press **OK**. Device List will appear.

The registered MAC Address can be deleted one by one by pressing **RED** key in the List.

When doing so the following text can be seen "Do you want to unregister this device? Yes/No" (default cursor is "No").

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Using the Media Player

This TV allows you to enjoy movie, music and photo files stored on a USB device connected to the USB port.

Moreover, you can also play photos, movies or music files from your PC by connecting the TV to your home network.

Terminology:

DMP: Digital Media Player

DMS: Digital Media Server

DMR: Digital Media Renderer

DMC: Digital Media Controller

- DMP: The TV can control and play content from a DMS.
  - A DMS is a device that can function as a server for DMP or DMR.
- DMR: The TV can play content from a DMS. Playback is controlled by a DMC.
  - A DMC is a device that can instruct the TV to play content.

NOTE:
- Do not insert/remove USB device while in use.
- MENU is not available during playback.
- When you want to use your TV as a media renderer, set **Media Renderer** to **On** (see "Media Renderer Setup" on page 47).

Media Player Specifications

Device

    USB device

    Interface version: USB2.0 High-Speed

    USB Mass Storage Class devices (MSC)

    NOTE:
    •Connectivity is not guaranteed for all devices.
    •Incorrect behaviour may occur with a USB hub connection.

    File system: FAT16 and FAT32

    Maximum memory size: Depend on file system

Basic operation

Using Media Player with USB

When **Auto Start** is enabled, you will be asked if you want to start the Media Player whenever a USB device is inserted. If **Auto Start** is disabled (or if you want to connect to a media server on the network), you must manually start the Media Player from the menu.

To change the Auto Start setting:

1 Press ⚒ and ▲ / ▼ to highlight **Options** icon.

2 Press ▶ and ▲ / ▼ to select **Media Player Setup** and press **OK**.

3 Press ▲ / ▼ to select **USB Auto Start** and press **OK**.

4 Press ▲ / ▼ to select **On** or **Off**.

Auto Start

1 Insert a USB device into the USB port on the left side of the TV. A prompt will appear.

2 Press ◀ / ▶ to select **Yes** and press **OK**.

3 Press ▲ / ▼ to select **Videos**, **Music** or **Photos** and press **OK**.

4 Press ▲▼◀▶ to select **Devices** and press **OK**.

5 Press ▲ / ▼ to select a device and press **OK**.

NOTE: If **Auto Start** is set to **Off**, you can start the Media Player manually.

Manual Start

1 Insert a USB device into the USB port on the left side of the TV.

2 Press 🔲 and select **My Music**, **My Videos**, **My Photos** or **My Contents** icon and press **OK**.

3 Press ▲▼◀▶ to select **Devices** and press **OK**.

4 Press ▲ / ▼ to select a device and press **OK**.

Files are displayed in the List View according to the category (**Videos**, **Music** or **Photos**) and device you last selected.

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To select a file in the list of contents:

1 Press ▲▼◄► to select a file or folder.

2 Press **OK** to move to the next layer, or press **BACK** to return to the previous layer.
When you select a file, press **OK** to play or view.

To move to the tab selection:

1 Press the **BLUE** button.

To close the Media Player:

1 Press **EXIT**.

Using the Media Player with a media server

You need to configure a home network before using this feature (see page 13).

1 Press [icon] and select **My Music**, **My Videos**, **My Photos** or **My Contents** icon and press **OK**.

2 Press ▲▼◄► to select **Device Name** icon and press **OK**.

3 Press ▲ / ▼ to select a device and press **OK**.

List of Contents

▷ Videos ◎ Music ☐ Photos		🔍 Search
Devices: **CTV-5**	Sort: Title	
	Date	
🗁 ⊙ **Video**	23:59, Wed, 31 Dec 1969	
🗁 ⊙ **Music**	23:59, Wed, 31 Dec 1969	
🗁 ⊙ **Photos**	23:59, Wed, 31 Dec 1969	
🗁 ⊙ **User Files**	23:59, Wed, 31 Dec 1969	
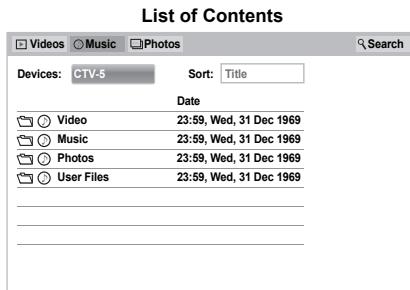
Videos, Music and Photos files and folders are displayed in the list of contents.

To select a file in the list of contents:

1 Press ▲▼◄► to select a file or folder.

2 Press **OK** to move to the next layer, or press **BACK** to return to the previous layer.
When you select a file, press **OK** to play or view.

To sort files (if available):

You can sort files by file name (title) or date accordingly.

1 Press ▲▼◄► to highlight **Sort** and press **OK**.

2 Press ▲ / ▼ to select File **Name** (Title), **New** or **Old** and press **OK**.

To Search for content (if available):

1 Press ▲▼◄► to highlight **Search** and press **OK**.

2 Select the text box and press **OK**, the Software Keyboard window will appear (page 46). Input keyword by using the Software Keyboard and the search will search for:

Network
Videos: Title name
Music: Title name/Artist name/ Album name
Photos: Title name
USB
Videos/Music/Photos: File name.

3 Select Devices and Category and press **OK**. The list of search result will appear.

To display the Device Information or Wireless Information:

1 Press **QUICK** to open the **QUICK Menu**.

2 Press ▲ / ▼ to select any of the following item.

Using with DLNA: **Device Information**
Using with Wireless: **Wireless Information**

To close the Media Player:

1 Press **EXIT**.

Viewing photo files (on a media server or USB device)

There are two types of viewing modes.

Photos List (USB and Network Player Photo)

This view allows you to search for photos in a grid format. The pictures are displayed using thumbnail data in each image file.
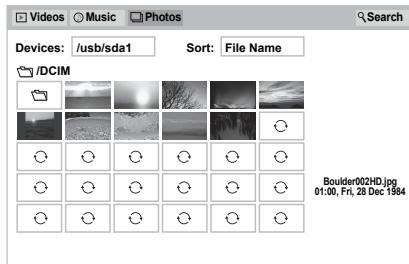
The initial highlighted position will be on the top left thumbnail in the Photos List.

1 Press ▲▼◄ ► to move the highlight in one window.

≫ or ≪ buttons can be used to page up/down the Photos List when there are more photos than will fit onto one screen. When the ≫ or ≪ buttons are pressed, the highlight shall be on the photo at the top left of Previous/Next Photos List.

NOTE: The page down function on the last page and page up function on the first page are not available.

2 When you select a folder, press **OK** to move to the next layer. Press **BACK** to move back to the previous layer.

3 Press **OK** to view the selected photo in Single View mode.

Single View (USB and Network Player Photo)

In this mode, only files located in the selected directory will be displayed. This view allows you to change the photo content manually. When moving from Photos List to Single View, the currently selected photo will be displayed.

1 Press ► to view the next photo. Press ◄ to view the previous photo.

2 Press [i+] to display file status information (file number, photo title, resolution etc.).

NOTE: The information may not be correctly displayed depending on the contents or the devices.

Slide Show (USB and Network Player Photo)

This view allows you to watch a slide show of your photos. In this mode, only files located in the selected directory will be played.

1 To start Slide Show, press **OK** in the Single View mode.

2 Press ◄ / ► to view the previous/next photo.

3 Press [i+] to display file status information. Press **OK** to return to Single View.

To set Interval Time and Repeat settings:

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select either **Interval Time** or **Repeat**.

3 Press ► and ▲ / ▼ to adjust the setting and press **OK**.

To rotate the image:

While viewing the image in Single View or Slide Show mode, the image can be rotated 90°.

▲ button: Clockwise rotation

▼ button: Counterclockwise rotation

NOTE: You can not rotate in 3D (2D to 3D) mode.

Selecting the Playback Mode:

You can view 3D photos in 3D and you can also view 2D photos in 3D.

1 Press **3D** on the remote control while in **Single View** mode or **Slide Show** mode.

The mode switches between 2D Mode and 3D Mode each time 3D button is pressed.

2D Mode: All photos are displayed in 2D.

3D Mode: The photos are displayed in the 3D mode selected in the Playback Mode. For the Playback Mode, refer to the following:

Setting the Playback Mode in Quick Menu:

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **Playback Mode**.

3 Press ▶ and ▲ / ▼ to select **3D Mode 1** or **3D Mode 2**.

3D Mode 1: 3D photos in the USB memory are displayed in 3D. 2D photos are displayed in 2D. Some 3D photos cannot be displayed in 3D.

3D Mode 2: All photos are displayed in 3D. 2D photos are converted and displayed in 2D to 3D, and 3D photos are displayed in 3D.

To set Background Music (USB only):

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **Background Music** and press ▶ and ▲ / ▼ to select **On**.

The music file in the same folder as the displayed photo will start playing.

NOTE:
• All the music files in the same folder as the photo will be played repeatedly.
• To stop music file playback, select **Off** in **Background Music**.

To zoom in/out photos (USB and Network Player Photo):

During the Single View mode or Slide Show mode, the zoom function can be used.

RED button (Zoom in)

x1 ⟶ x2 ⟶ x4 ⟶ x8 zoom in

GREEN button (Zoom out)

x8 ⟶ x4 ⟶ x2 ⟶ x1 zoom out

▲▼◀ ▶ **buttons:** Vertical or Horizontal scrolling

NOTE: Using the zoom function while in the **Slide Show** mode will stop the slideshow and zoom in/out the photo.

To select a photo from Play List (USB and Network Player Photo):

While in the **Single View** mode or **Slide Show** mode, you can select a different photo from the **Play List**.

1 Press **QUICK** to open the **Quick Menu** from **Single View** mode or **Slide Show** mode.

2 Press ▲ / ▼ to select **Play List** and press **OK**. The Photos List will appear.

3 Press ▲ / ▼ to select a file name.

To close the Photo Viewer:

1 Press **EXIT**. The television will return to the last viewed channel or external input.

File Compatibility

See page 90.

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Viewing movie files (on a media server or USB device)

*You can select movies from a **Videos List** of available files.*

Videos List (USB and Network Player Movie)

1 Press ▲▼◄ ► to select a file or folder. ⩙ or ⩦ buttons can be used to page up/down the **Videos List** when there are more files than will fit onto one screen.

NOTE: The page down function on the last page and page up function on the first page are not available.

2 When you select a folder, press **OK** to move to the next layer. Press **BACK** to move back to the previous layer.

3 With the desired file selected, press **OK** or ► (play) to start playback.

NOTE:
- On preview screen, if you highlight the file without pressing **OK**, the content is played on a preview screen. When **OK** is pressed, it is played in full screen mode.
- Depending on the file size, it may take some time to start playback.

4 Press ■ to stop playback.

NOTE:
- If playback finishes before ■ is pressed, the screen will return to the **Videos List**.
- Depending on the file size, it may take some time for playback to begin.

During playback:

- Press ❚❚ to pause.
  PAUSE may not be available depending on the contents or media server.
- To resume normal playback, press ► (play).
- To play in fast reverse or fast forward directions, press ◄◄ / ►► during playback. Each time you press the ◄◄ / ►►, the playback speed will change.
- Press ◄◄ to playback from the beginning of currently selected file. Press ►►❙ to locate subsequent files.
- Press ⓘ+ to display the file status information (content number, movie title, progress time etc.).

NOTE:
- The information may not be correctly displayed depending on the contents or the devices.
- During playback, you can adjust the **Picture** and **Sound** menu functions from the **Quick Menu**.
- The playback speed (◄◄ / ►►) may not change depending on the stream.

To select subtitle and audio languages (USB only):

- Press **SUBTITLE** repeatedly to select your preferred subtitle language.
- Press ◯I/II repeatedly to select your preferred audio language.

NOTE: This feature is not available depending on the contents.

To set the repeat mode:

1 Press **QUICK** to open the **Quick Menu.**

2 Press ▲ / ▼ to select **Repeat** and press ► and ▲ / ▼ to select **Off**, **All** or **1**.

Mode	Description
Off	The file is played back only once.
All	Files in the same folder are repeatedly played back.
1	The same file is repeatedly played back.

3 Press **BACK**.

NOTE:
- The setting is effective until the TV is turned off.
- This setting is ignored in the network media renderer.

Resume Play (USB only)

You can resume playback from where it was last stopped.

Press ■ while playing the movie to memorize the stopped position.

NOTE:
• The memorized stopped position will be deleted in any of the following cases.
  - Play different content
  - Exit Media Player
  - Press ■ in the Videos List
• This function may not be available depending on the content.

To select a movie from Play List (USB and Network Player Movie):

While playing a movie, you can select a different movie from the **Play List**.

1 Press **QUICK** to open the **Quick Menu**.

2 Press ▲ / ▼ to select **Play List** and press **OK**. The Movie List will appear.

3 Press ▲ / ▼ to select a file name.

To close the Movie Viewer:

1 Press **EXIT**.

File Compatibility

See page 90.

To register your TV to a DivX® account:

This TV allows you to play back files purchased or rented from DivX® Video-On Demand (VOD) services. When you purchase or rent DivX® VOD files on the internet, you will be asked to enter a registration code.

1 In the **Media Player Setup** menu, press ▲ / ▼ to select **DivX® VOD** and press **OK**.

2 Press ▲ / ▼ to select **DivX® VOD Registration** and press **OK**.

```
< DivX® VOD
  DivX® VOD Registration              ▶
  DivX® VOD Deregistration
```

3 The **DivX® VOD** window will appear and you will see the registration code. For details on registration, please visit the DivX® website at

http://vod.divx.com

4 Copy the activation file to a memory device and play it on the TV.

To deregistration your device:

1 In step 2 above, select **DivX® VOD Deregistration**, and then press **OK**.

2 A confirmation message will appear. Select **Yes** and press **OK**.

3 The **DivX® VOD** window will appear and you will see the deregistration code. For details on registration, please visit the DivX® website at

http://vod.divx.com

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

DivX Certified® to play DivX® and DivX Plus® HD (H.264/ MKV) video up to HD 1080p, including premium content.

To playback DivX Plus HD content:

• To play in fast reverse or fast forward directions, press ◄◄ / ►► during playback. Each time you press the ◄◄ / ►►, the playback speed will change.

• This TV generates original chapter point in 10 % increments for 10 chapters in total, that are accessible by using the number buttons on the remote control.

During playback, press ►►I to skip to the beginning of the next chapter. When ►►I is pressed twice in succession, it will repeat two times of above. If ►►I is pressed at the last chapter, the confirmation message will appear. If you select **Yes**, playback will skip to the beginning of the next content.

Press I◄◄ to skip to the beginning of the current chapter. When I◄◄ is pressed twice in succession, it will skip to the beginning of the previous chapter. If I◄◄ is pressed twice in succession at the first chapter, stop playing the current content and the confirmation message will appear. If you select **Yes**, playback will skip to the beginning of the previous content.

Press ▲ to skip to the beginning of the previous file. Press ▼ to skip to the beginning of the next file.

The Number button is used for direct jump. If the 3 button and **OK** button is pressed, playback will jump to the beginning of 3rd chapter.

NOTE:
• Depending on the content data will not be operated.
• The playback speed (◄◄ / ►►) may not change depending on the stream.

Using Multi Title and Alternative Timelines
Multi Title

DivX Plus HD files may contain up to 100 titles.

You can change the title (It contains same video file) by pressing the **RED** button.

When the **RED** button is pressed, it will display the title change window at the bottom on the screen (same as Subtitle or Audio change window).

The title is changed cyclically each time the **RED** button is pressed. Playback will start from start time of selected title every ▲ / ▼.
Pressing ◄ / ► also changes the multi title.

NOTE: Depending on the content data will not be operated.

Playing music files (on a media server or USB device)

*You can listen to music from a **Music List** of available files.*

Music List (USB and Network Player Music)

▶ Videos	◉ Music	▭ Photos		🔍 Search
Devices: /usb/sda1		**Sort:** File Name		
		Date		
🗀 ◉ xxxxxxxxxx		08:22, Web, 31 Oct 2012		
🗀 ◉ xxxxxxxxxx		13:00, Mon, 23 Jan 2012		
🗀 ◉ xxxxxxxxxx		14:24, Tue, 01 Mar 2011		
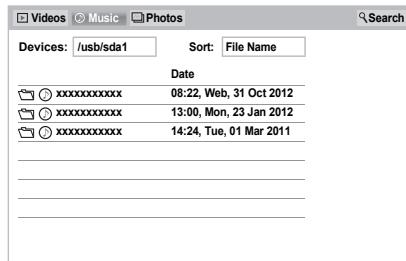
1 Press ▲▼◄ ► to select a file or folder. ⩘ or ⩗ buttons can be used to page up/down the **Music List** when there are more files than will fit onto one screen.

NOTE: The page down function on the last page and page up function on the first page are not available.

2 When you select a folder, press **OK** to move to the next layer. Press **BACK** to move back to the previous layer.

3 With the desired file selected, press **OK** or ► (play) to start playback.

NOTE: If you highlight the file without pressing **OK**, the content is played on a **Music List**. When **OK** is pressed, it is played in full screen mode.

4 Press ■ to stop playback.

NOTE:
• Depending on the file size, it may take some time for playback to begin.
• During playback, you can adjust the **Sound** menu functions from the **Quick Menu**.

During playback

• Press II to pause.
PAUSE may not be available depending on the contents or media server.
• To resume normal playback, press ► (play).
• To play in fast reverse or fast forward directions, press ◄◄ / ►►. Each time you press ◄◄ / ►►, the playback speed will change.
• Press I◄◄ to playback from the beginning of currently selected file. Press ►►I to locate subsequent files.

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To set the repeat mode:

1   Press **QUICK** to open the **Quick Menu**.

2   Press ▲ / ▼ to select **Repeat**.

3   Press ▶ and ▲ / ▼ to select **Off**, **All** or **1**.

Mode	Description
Off	Files in the same folder are played back once.
All	Files in the same folder are repeatedly played back.
1	The same file is repeatedly played back.

4   Press **BACK**.

NOTE:
• The setting is effective until the TV is turned off.
• When the TV is used as a media renderer, this feature cannot be used.

To select a music file from Play List (USB and Network Player Music):

While playing a music file, you can select a different music file from the **Play List**.

1   Press **QUICK** to open the **Quick Menu**.

2   Press ▲ / ▼ to select **Play List** and press **OK**. The Music List will appear.

3   Press ▲ / ▼ to select a file name.

To display the file status information:

1   Press [i+] during playback. The information will be displayed on the bottom of the screen.

2   Press [i+] again to remove the information.

NOTE: The information may not be correctly displayed depending on the contents or the devices.

To close the Music Player:

1   Press **EXIT**.

File Compatibility

See page 90.

Other features

Panel Lock

Panel Lock disables the buttons on the television. All buttons on the remote control can still be used.

1   Press ✎ and ▲ / ▼ to highlight **Options** icon.

2   Press ▶ and ▲ / ▼ to select **Panel Lock** and press **OK**.

3   Press ▲ / ▼ to select **On**.

< Options		
Recording Setup		
Media Player Setup		
MHL Setup		
HDMI CEC Control Setup		
Teletext	Auto	
Panel Lock	Off ▶	**On**
AV Connection		Off
Power Management		
Blue Screen	Off	
HDMI Information Display	On	
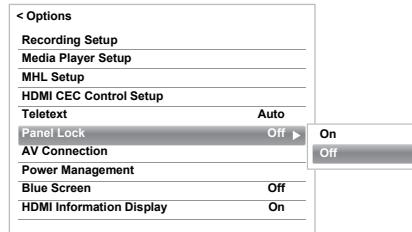
When **Panel Lock** is **On**, a reminder will appear when the buttons on the television are pressed. **If the standby button is pressed**, **the television will switch off and can only be brought out of standby by using the remote control.**

Blue Screen

*When **Blue Screen** is selected, the screen will turn blue and the sound will be muted on analogue channels and external input modes when no signal is received.*

NOTE: Some external input sounds may not be muted.

1   In the **Options** menu, press ▲ / ▼ to select **Blue Screen**.

2   Press ▶ and ▲ / ▼ to select **On** or **Off**.

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The timers

Programme Timers – digital only

This feature will set the television to go to a specific channel at a certain time. It can be used to view a particular programme, or by setting the mode to daily or weekly, can be used to view a series of programmes.

1 Press **GUIDE** and then press the **BLUE** button on the remote control

2 Press ▼ if necessary to select an open timer position, then press **OK**. The **Edit Timer** menu will now appear on screen.

3 Press ▲ / ▼ to go through the list adding the details of the programme by using the number buttons and ◄ / ► to make selections.

Edit Timer	5:51 Tue, 22 Apr
Timer Type	Recording
Channel	▮ 1 ABC HDTV
Date	Tue, 22 Apr 2008
Start Time	09:43
End Time	10:43
Repeat	Once
Set Timer	Delete Timer
OK	Enter
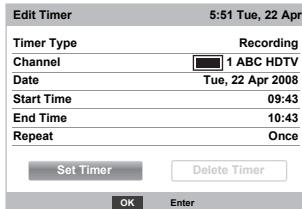
4 When all of the details have been entered, highlight **Set Timer** and press **OK** to save the timer.

On Timer

The feature allows you to set the television to turn on automatically to a preset channel at a certain time of day or after a certain length of time.

1 Press ◖—◗ and ▲ / ▼ to highlight **Timers** icon.

2 Press ► and ▲ / ▼ to select **On Timer** and press **OK**.

3 Press ▲ / ▼ to select **Enable On Timer** and press ◄ / ► to select **On**.

On Timer	
Enable On Timer	◄ On ►
Enable DTV Clock	Off
Power On Time	00:00
Repeat	Once
Input	DTV
Channel	2 CABC Channel
Volume	30
Time until Power On	00:10
Done	
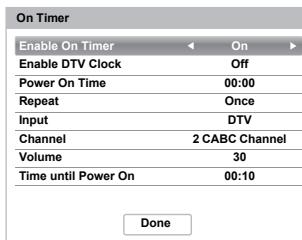
4 Press ▼ to select **Enable DTV Clock**, and then press ◄ / ► to select **On** or **Off**.

5 Press ▲ / ▼ to go through the list adding the details of the On Timer by using the number buttons and ◄ / ► to make selections.

Power On Time (only for DTV Clock On mode)**:** Set the time you prefer with the number buttons.
Repeat (only for DTV Clock On mode)**:** Select the desired On Timer operation (**Once**, **Every Day**, **Mon-Fri**, **Mon-Sat**, **Sat-Sun**).
Input: Select a video input source (ATV, DTV Ant, EXT 1, EXT 2, HDMI 1, HDMI 2, HDMI 3, HDMI 4 or PC).
Channel: Set the channel that will be tuned when the television turns on.

NOTE: When an external input is selected in the **Input** field, a channel cannot be selected.

Volume: Set the volume that will be applied when the television turns on.
Time until Power On (only for DTV Clock Off mode)**:** Set the amount of time from now until the TV turns on using the number buttons (maximum of 12 hours).

6 Press ▲ / ▼ to highlight **Done** and press **OK**.

To cancel the On Timer:

1 In the **On Timer** menu, select **Enable On Timer**.

2 Press ◄ / ► to select **Off**.

3 Press ▲ / ▼ to highlight **Done** and press **OK**.

Sleep Timer

The television can be set to turn itself **Off** *after a certain length of time.*

1 Press ◖—◗ and ▲ / ▼ to highlight **Timers** icon.

2 Press ► and ▲ / ▼ to highlight **Sleep Timer** and press **OK**.

3 Use the number buttons to set the desired time. For example, to switch the television off in one and a half hours enter 01:30, or press ► / ◄ to increase/decrease in steps of 10 minutes. (Maximum time setting is 12 hours)

4 Press **EXIT** to finish.

5 To cancel the **Sleep Timer**, enter all zeros for the above setting.

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Energy Saving Settings

Automatic Power Down

The TV will automatically turn itself off (Standby) after 4 hours, if you do not operate the TV either from the remote control or the TV control panel.

1 Press ⟩⟨ and ▲ / ▼ to highlight **Options** icon.

2 Press ▶ and ▲ / ▼ to select **Power Management** and press **OK**.

3 Press ▲ / ▼ to select **Automatic Power Down**.

4 Press ▶ and ▲ / ▼ to select **On** or **Off** and press **OK**.

NOTE:
• This feature is set to **On** when **Location** is set to **Home**.
• 1 minute before switching to Standby, a Warning message will appear.
• When the following features are set, the feature that is set for the nearest time will function.
  - Automatic Power Down
  - Sleep Timer
  - Auto shutdown after 1 hour of inactivity (after power on by On Timer)
  - No signal auto power off (after 15 minute of no signal)

No Signal Power Down

The TV will automatically turn itself off after 15 minutes when no signal is detected. You can change the setting to Off for the following purposes:

• Low signal strength of analogue channel (no signal detection)
• Only Audio L/R is connected to external input to listen to music through the TV speakers.

1 In the **Power Management** menu, press ▲ / ▼ to select **No Signal Power Down**.

2 Press ▶ and ▲ / ▼ to select the item you want to change and press ▶ and ▲ / ▼ to select **On** or **Off**.

NOTE:
• Default setting is all **On**.
• A warning message will appear 1 minute before turning off.

Digital on-screen information

When viewing in **digital** mode, the on-screen information and programme guide provide access to programme details for all available channels.

Information

1 Press [i+], the information screen will appear giving details of the channel and programme currently being viewed.

Display Example

4	CHANNEL Z	6:00 Thu, 11 Oct

● REC ▭ 4

⊞ D+ ⊚ ᵃᵈ **English**

3D→2D **Side by Side**

Now	MLB Young's two-run triple leads AL over NL	6:00- 8:00
HD 16:9	AD 18 News	15 min left
Next	World News and Sports	8:00- 9:00
	Change	

2 Press ▲ / ▼ to select the "**Now**" or "**Next**" information guide.

The selected information content will appear.

3 To record the next scheduled programme, select **Next** and press **OK**. The **Edit Timer** screen will appear.

Edit Timer	10:50 Tue, 26 Apr
The Daily Politics	
2 CABC Channel	
11:30 - 12:30 Tue, 26 Apr	
Timer Type	Recording
Set Timer	Delete Timer

4 The details of the programme will already have been added to the timer. Highlight **Set Timer** and press **OK** to save.

To indicate that a Recording Timer has been set, a clock icon will be displayed in the **Next** fields of the information screen. A check mark will appear if the timer is a Reminder Timer.

To display More Information:

❶ Press **QUICK** to open the **Quick Menu**.

❷ Press ▼ to highlight **More Information** and press **OK**.

On-screen Information icons

	Icon	Description
Service info	▬ ▦ ▤	Service type (TV, Radio, Text)
	⟿	Skip
Audio info	◯	Mono
	◯◯	Stereo
	●◯	Dual mono
	◌◌	Surround
	▣D	Dolby Digital
	▣D+	Dolby Digital+
	▣P	When HE-AAC is decoded
	AD	Audio Description
Audio/Subtitle info	🦻	For Hard of Hearing
Recording info	●REC	Recording + Service info
3D info	3D 3D → 2D	
Event info	HD, SD	Video format (HD, SD)
	16:9, 4:3	Video Aspect
	▤	Teletext
	[....] [.⊡.]	Subtitle (Single, Multi)
	⊲ ⊲⊲	Audio track (Mono, Multi)
	0, 4 – 18	Parental rating
	⟁	Encrypted
Timer info	⊕	Recording
	✓	Reminder

Using EPG (Electronic Programme Guide)

Using Broadcast Guide

❶ Select the on-screen Guide by pressing **GUIDE**, and the Guide screen will appear highlighting details of the channel and programme currently being viewed. This may take a few moments to appear.
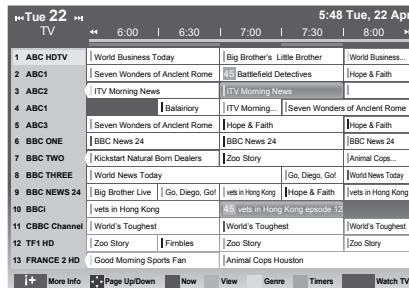
You can switch the time scale to 1.5 or 3 hours by pressing the **GREEN** button.

❷ Press ◄ / ► for information on other programmes scheduled for the channel selected. To highlight the first programme in the genre grid, press the **RED** button.

❸ For details of other programmes currently available, press ▲ / ▼ to scroll up and down the channel list. As channels are selected, details of the programme currently being broadcast will appear. Press ◄ / ► to view information for future programmes.

❹ For information on a highlighted programme, press ⓘ⁺.

❺ To set the timer for that programme, press the **BLUE** button to bring up the **Programme Timers** menu.

❻ Press ⟰ ⟱ ⟪ ⟫ to view another page.

Updating EPG:

❶ In the Guide screen press **QUICK**.

❷ Press ▲ / ▼ to select **EPG Update**.

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Genre selection/searching

From the Guide screen, you can use the genre selection and search features.

1 In the Guide screen, press **QUICK**.

2 Press ▲ / ▼ to highlight **Genre Colour** in the **Quick Menu** and press **OK**.

Genre Colour Setup

Movie

Colour Setup

3 With the focus on a particular genre, press the desired coloured button to assign. Four colours will be available to set. Press **BACK** to go back to the Guide screen.

Digital settings – parental control

In order to prevent viewing of unsuitable films and programmes, channels and menus can be locked in digital mode. These can then only be accessed with a security code PIN.

Parental PIN Setup

1 Press ⚒ and ▲ / ▼ to highlight **Installation** icon.

2 Press ▶ and ▲ / ▼ to select **DTV Settings** and press **OK**.

3 Press ▲ / ▼ to select **Parental PIN Setup** and press **OK**.

< DTV Settings

Channels	
Subtitle and Audio	
Parental PIN Setup	▶
Parental Control	
Local Time Setting	
Standby Channel Update	Off
Dynamic Scan	Off
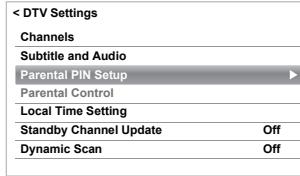
4 Using the number buttons enter a four digit number. Once entered you will be prompted to confirm by entering again.

Parental PIN Setup				
New PIN:	•	•	•	•
Confirm PIN:	•	•	•	•

The PIN number is now set.

If the PIN code has been set, when **Auto Tuning** and **Reset TV** are executed, entering the PIN will be necessary. "0000" is not acceptable.

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Parental Setup

The Parental Control feature allows you to block programmes according to their rating levels. If a PIN has been set, you will need to enter it before adjusting the level.

1 In the **DTV Settings** menu, press ▲ / ▼ to select **Parental Control** and press **OK**.

2 Press ▲ / ▼ to select **Parental Setup** or **Playback Setup** and press **OK**.

Parental Setup: Select when you want to set viewing restrictions on broadcast programmes.

Playback Setup: Select when you want to set viewing restrictions on playback of programmes recorded to the USB HDD.

3 Press ▲ / ▼ to select an option.

< Parental Control	
Parental Setup	None ▶
Playback Setup	Enabled

None
Block all
Block G and above
Block PG and above
Block M and above
Block MA and above
Block AV and above
Block R and above
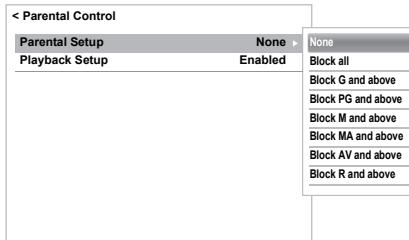
To view blocked programmes, enter the PIN. To reactivate the Parental Control, turn the TV off and then on again.

Digital settings – Channel Options

Selecting favourite channels

*From the **Quick Menu** ⁄ **Channel Options** menu, it is possible to create a list of the digital channels that are watched most. Press **LIST** ⁄ ◄► to select the Favourite Channel list.*

1 Select the channel you want to add to your favourite list.

2 Press **QUICK** to open the **Quick Menu**.

3 Press ▼ to select **Channel Options** and press **OK**.

4 Press ► to highlight the favourite (☆) box.

5 Press **OK** to select the ones required. A tick will appear in the box as they are selected.

6 Repeat steps 1 through 5 for other channels.

7 When all favourites have been selected, press **EXIT**.

Favourite Channel List

1 Press **LIST** to display **Channel List**.

Each time you press ◄ / ►, **All Channels**, **TV Channels**, **Radio Channels**, **Text Channels** or **Favourites** is selected in order.

2 Press ◄ / ► to select **Favourites**. The number of favourites available depends on how many lists have been created.

Channel List		
◄	Favourites	►
6	M6	
9	W9	
11	NT1	
31	PARIS PREMIERE	
34	AB1	
51	ITV1	

3 Press ▲ / ▼ to highlight a channel and press **OK** to watch.

Skip channels

This feature allows you to set channels that will be skipped when P⌄ or P⌃ are used to tune.

1 Select the channel you want to skip in your channel list.

2 In the **Quick Menu**, press ▼ to select **Channel Options** and press **OK**.

3 Press ▶ repeatedly to highlight the skip (↶➜) box.

4 Press **OK** to select. A tick will appear in the box.

5 Repeat steps 1 through 4 for other channels.

6 Press **EXIT**.

NOTE: Skipped channels cannot be selected by P⌄ or P⌃ but still be accessed by direct number entry (when tuned a ↶➜ icon will be displayed in the banner to indicate as a skipped channel).

Locking channels

Locking Channels stops the viewing of **digital** *channels, and they can only be accessed by entering the PIN.*

1 Select the channel you want to lock in your channel list.

2 In the **Quick Menu**, press ▼ to select **Channel Options** and press **OK**.

3 Press ▶ repeatedly to highlight the lock (🔒) box.

4 Press **OK** and PIN entry will be required to set the locked channels. Enter **PIN Code** and a tick will appear in the box.

NOTE: A Parental PIN should be set in advance.If not, a warning message will display to reminder you to set a PIN first.

5 Repeat steps 1 through 4 for other channels.

6 Press **EXIT**.

7 From this point on, when any of the **Locked Channel** list is selected, the PIN must be entered before they can be accessed.

Digital settings – other settings

Subtitles

In DTV mode, this feature will show subtitles on the screen in the selected language provided they are being broadcast.

1 In the **DTV Settings** menu, press ▲ / ▼ to select **Subtitle and Audio** and press **OK**.

2 Press ▼ to select **Subtitle Display** and press ▶ and ▲ / ▼ to select **On** or **Off**.

< Subtitle and Audio	
Subtitle Display	**Off ▶**
Subtitle Type	Normal
Primary Subtitle Language	English
Secondary Subtitle Language	English
Audio Type	Normal
Primary Audio Language	English
Secondary Audio Language	English

3 Press ▲ / ▼ to select **Primary Subtitle Language** or **Secondary Subtitle Language** and press ▶ and ▲ / ▼ to select an option.

The **SUBTITLE** button can be used to select subtitle on or off for the current channel only and to select the subtitle language if more than one subtitle is available.

Audio languages

This feature allows a programme or film to be viewed with a choice of soundtrack language, provided multiple language tracks are being broadcast.

1 In the **Subtitle and Audio** menu, press ▲ / ▼ to select **Audio Type** and press ▶ and ▲ / ▼ to select **Normal**, **For Hard of Hearing** or **Audio Description** and press **OK**.

2 Press ▲ / ▼ to select **Primary Audio Language** or **Secondary Audio Language** and press ▶ and ▲ / ▼ to select an option.

If more than one soundtrack is available, use the ◯◯I/II button to select between them.

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Software Upgrade and Licences

Searching for New Software

If preferred, software upgrades can be searched for manually using **Search for New Software**.

1 In the **Get Help** menu, press ▲ / ▼ to select **Software Upgrade** and press **OK**.

2 Press ▲ / ▼ to select **Over-the air Upgrade** and press **OK**.

3 Press ▶ and ▲ / ▼ to select **Search for New Software** and press **OK**. The television will automatically start searching for a software upgrade, the progress bar will move along the line.

```
SEARCH FOR NEW SOFTWARE
Searching for a new software upgrade for this TV.
48 %...
                    CH  31
```
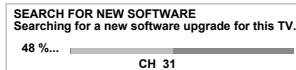
If an upgrade is found, the television will automatically start downloading. If not, a screen will appear stating that an upgrade is unavailable.

NOTE: When **Auto Upgrade** is set to **Off**, this feature is not available.

Network Upgrade

TOSHIBA may offer upgrades for the TV's software in the future. The TV's software is upgraded via the Network.

Before downloading software:

Configure your TV to connect to the Internet.

NOTE: While the upgrade is being performed, you will not be able to watch the TV.

1 In the **Get Help** menu, press ▲ / ▼ to select **Software Upgrade** and press **OK**.

2 Press ▲ / ▼ to select **Network Upgrade** and press **OK**.

   NOTE: If the network is not available, a warning message will appear.

3 The TV software upgrade will start when download succeeds.

Software Licences

The licences for the software used in this television are available for viewing.

1 In the **Get Help** menu, press ▲ / ▼ to select **Software Licences** and press **OK**.

A screen will appear displaying all the licensing information required for the televisions software.

System Information and Reset TV

System Information

This feature can be used to check the version of software currently installed. When in DTV mode, it includes additional diagnostic information such as signal strength, signal quality, centre frequency, modulation, etc.

1 In the **Get Help** menu, press ▲ / ▼ to select **System Information**.

2 Press **OK** to display the **System Information**.

System Information
TOSHIBA
2013
Jan 19 2013
Software Version : xxxxxxxx
MBOOT Version : xxxxxxxx

	AVERAGE		
CH 25	**WEAK**	**STRONG**	**GOOD**
	AVERAGE		
CH 33	**WEAK**	**STRONG**	**GOOD**
	AVERAGE		
CH 67	**WEAK**	**STRONG**	**GOOD**
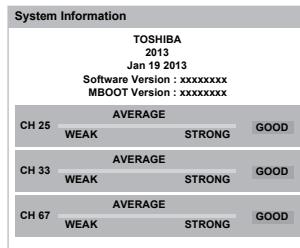
3 For information about the signal quality of a particular multiplex, press ▲ / ▼ to select that multiplex.

4 Press **OK** for a screen showing detailed technical information about the selected multiplex.

Reset TV

*Selecting **Reset TV** will reset all TV settings, including saved channels, to their original factory values.*

1 In the **Installation** menu, press ▲ / ▼ to select **Reset TV**.

2 Press **OK** to select. A screen will appear warning that all settings will be lost. Press **OK** to continue.

When the set powers back on, the **Quick Setup** screen will appear. Press **OK** to advance the setup and perform an auto tune. (See "Quick Setup" section on page 16.)

PC Settings

Horizontal and Vertical Position

Connect the PC (as shown in the 'Connecting a computer' section) and ensure that a picture is showing on the television screen. The picture position may now be adjusted to suit personal preference.

1 Press 🔧 and ▲ / ▼ to highlight **Picture** icon.

2 Press ▶ and ▲ / ▼ to select **Display Settings** and press **OK**.

3 Press ▲ / ▼ to select **PC Setting** and press **OK**.

< Display Settings	
Auto Format	**On**
4:3 Stretch	**Off**
Picture Position	
PC Settings	▶

4 Press ▲ / ▼ to select an option and press ◀ / ▶ to adjust the settings.

< PC Settings	
Horizontal Position	**0** ▶
Vertical Position	**0**
Clock Phase	**0**
Sampling Clock	**0**
Reset	
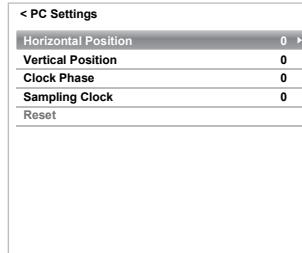
Clock Phase

*The **Clock Phase** matches the PC signal with the LCD display. Adjusting this can clear horizontal stripes and picture blur.*

1 In the **Display Settings** menu, press ▲ / ▼ to select **PC Settings** and press **OK**.

2 Press ▲ / ▼ to select **Clock Phase**.

3 Press ◀ / ▶ to adjust until the picture clears and press **OK**.

Sampling Clock

Adjusting the Sampling Clock alters the number of pulses per scan, this will clear vertical lines on the screen.

1 In the **Display Settings** menu, press ▲ / ▼ to select **PC Settings** and press **OK**.

2 Press ▲ / ▼ to select **Sampling Clock**.

3 Press ◀ / ▶ to adjust until the picture clears.

Reset

Use Reset to return all items to the original factory settings.

1 In the **Display Settings** menu, press ▲ / ▼ to select **PC Settings** and press **OK**.

2 Press ▲ / ▼ to select **Reset** and press **OK**.

NOTE: When a PC is connected using HDMI, none of these functions will be available.

The screen is disrupted momentarily when adjusting PC Settings. This is not a sign of malfunction.

The default settings and adjustment ranges may vary depending on the input signal format.

Input selection and AV connections

See page 9 for a detailed image showing recommended connections.

Most media recorders and decoders send a signal through the SCART lead to switch the television to the correct *Input* socket.

Alternatively, press the external source selection button ⊕ until the picture from connected equipment is shown.

Input selection

Use the Input Selection window if the television does not switch over automatically.

1 By pressing ⊕ on the remote control or TV, a list will appear on screen showing all inputs and external equipment.

Press ⊕ on the remote control

Inputs	
TV	▶
⊕ 1	
⊕ 2	
HDMI 1	
HDMI 2	
HDMI 3	
HDMI 4	
PC	

Press and hold ℗ / ⊕ on the TV
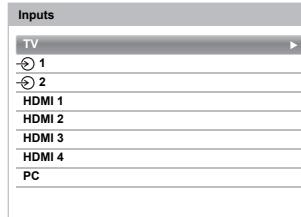
Inputs	
DTV Ant TV	▶
⊕ 1	
⊕ 2	
HDMI 1	
HDMI 2	
HDMI 3	
HDMI 4	
PC	
ATV	
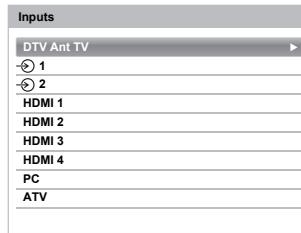
HDMI® displays equipment connected to *Input HDMI* on the back or side of the television.

PC displays a computer connected to *Input RGB/ PC* on the back of the television.

Labelling video input sources

These input labels are shown in the input selector. You can label video inputs according to the devices you have connected to the TV.

1 Press ⚙ and ▲ / ▼ to highlight **Options** icon.

2 Press ▲ / ▼ to select **AV Connection** and press **OK**.

< Options	
Recording Setup	
Media Player Setup	
MHL Setup	
HDMI CEC Control Setup	
Teletext	Auto
Panel Lock	Off
AV Connection	▶
Power Management	
Blue Screen	Off
HDMI Information Display	On
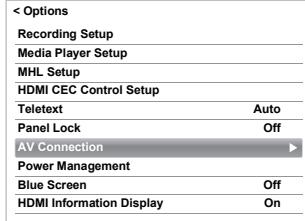
3 Press ▲ / ▼ to select **Input Labelling** and press **OK**.

< AV Connection	
Input Labelling	▶
Colour System	
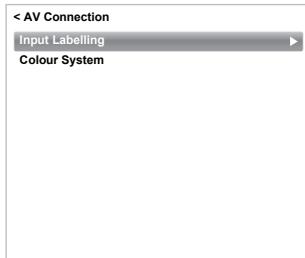
4 Press ▲ / ▼ to select the item you want to label, and then press ◀ / ▶ to select --, **Amplifier**, **Cable**, **DVD**, **Game**, **PC**, **Recorder**, **Satellite**, **VCR** or **Blu-ray**.

Input Labelling		
Input	Label	⚙➔
EXT 1	--	▶
EXT 2	--	
HDMI 1	--	
HDMI 2	DVD	
HDMI 3	--	
HDMI 4	--	
PC	--	
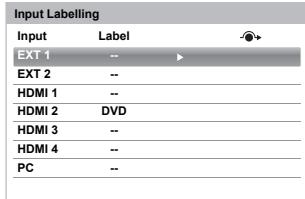
5 Repeat step 4 for other video inputs.

Digital Audio Output

When connecting a surround sound amplifier to the digital audio output (Sony/Philips Digital Interface Format [S/PDIF]), the following options can be selected or adjusted.

1 In the **Sound** menu, press ▲ / ▼ to select **Digital Audio Output** and press **OK**.

< Sound	
Balance	0
Bass	0
Treble	0
Advanced Sound Settings	
Dynamic Range Control	On
Dual	Dual 1
Audio Level Offset	
TV Speakers	On
Headphone Level	
Audio Description	
Digital Audio Output	
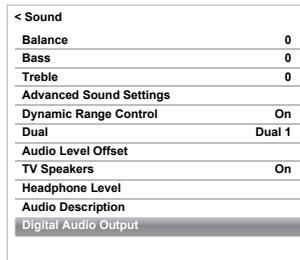
2 Press ▲ / ▼ to select an option.

Audio Format
Press ◀ / ▶ to select **PCM** or **Auto**.

PCM: This mode outputs PCM format to the digital audio output socket.

Auto: This mode outputs Dolby Digital (if available) or PCM to the digital audio output socket.
Dolby Digital ⟶ Dolby Digital
Dolby Digital Plus ⟶ Dolby Digital
MPEG ⟶ PCM
HE-AAC ⟶ Dolby Digital

Audio Delay
Press ◀ / ▶ to select **Auto** or **Manual**.

Auto: This mode automatically adjusts the audio timing to meet the video timing.
NOTE: The time lag might be large between the image and sound depending on the connected equipment (amplifier etc.). In that case, select **Manual**.

Manual: You can manually adjust the audio signal timing to meet the video signal timing.

Delay Adjustment
Press ◀ / ▶ to adjust the audio signal timing (0 – 250 ms) to meet the video signal timing.

NOTE:
- This feature is greyed out when **Audio Delay** is in **Auto**.
- A time lag will occur when the video signal or audio signal is changed. Adjust the timing accordingly.
- When adjusting the timing, turn down the volume of the AV equipment used as far as possible. Depending on the equipment, noise etc. may occur when the signal is changed.
- Depending on the connected equipment (amplifier, etc.), adjustment may not be possible.
- When the optical digital output setting (Auto←→PCM) is changed, it may be necessary to adjust the timing again.
- Do not use other than for audio output from the AV amplifier, etc. (Malfunction may occur)

Using HDMI CEC Control

This is a new feature that uses CEC technology and allows you to control Toshiba HDMI CEC Control compatible devices from the television remote control via HDMI connection (page 11).

When the **Enable HDMI CEC Control** item in the **HDMI CEC Control Setup** menu is set to **On**, individual functions also set to **On** will be activated.

Enable HDMI CEC Control

1 Press ○━◖ and ▲ / ▼ to highlight **Options** icon.

2 Press ▶ and ▲ / ▼ to select **HDMI CEC Control Setup** and pres **OK**.

3 Press ▼ to select **Enable HDMI CEC Control** and press ◀ / ▶ to select **On**.

< HDMI CEC Control Setup		
Enable HDMI CEC Control	**On ▶**	On
TV Auto Power	On	Off
Auto Standby	On	
Amplifier Control	On	
Initial Speaker Setting	TV Speakers	
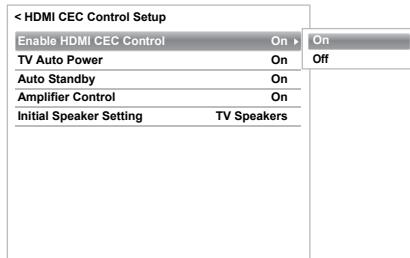
NOTE: If you set **Enable HDMI CEC Control** to **Off**, all other items will be greyed out.

TV Auto Power

The TV Auto Power setting allows the television to be automatically switched on if an HDMI CEC Control device is turned on.

1 In the **HDMI CEC Control Setup** menu, press ▼ to highlight **TV Auto Power**.

2 Press ▶ and ▲ / ▼ to select **On** or **Off**.

Auto Standby

*When **Auto Standby** is enabled, the television, when switched off, will automatically switch off (Standby) all connected HDMI CEC Control equipment.*

1 In the **HDMI CEC Control Setup** menu, press ▼ to highlight **Auto Standby**.

2 Press ▶ and ▲ / ▼ to select **On** or **Off**.

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Amplifier Control

When Amplifier Control is set to on/off the connected HDMI CEC Control amplifier.

1 In the **HDMI CEC Control Setup** menu, press ▼ to select **Amplifier Control**.

2 Press ▶ and ▲ / ▼ to select **On** or **Off**.

Initial Speaker Setting

The Initial Speaker Setting allows to select TV speakers or Amplifier speakers.

1 In the **HDMI CEC Control Setup** menu, press ▼ to select **Initial Speaker Setting**.

2 Press ▶ and ▲ / ▼ to select **TV Speakers** or **Amplifier**.

HDMI CEC Control input source selection

If an HDMI CEC Control device with HDMI switching capability (e.g. AV amplifier) is connected to the HDMI input, you can select another HDMI CEC Control device that is connected to the master HDMI device on the input source list.

1 Press ⊕ and a list will appear on screen showing available input sources.

2 Press ▼ to select the input source that the HDMI CEC Control devices are connected.

3 Press ▶ and a second selection screen will appear showing all connected HDMI CEC Control equipment.

Inputs		
TV		
⊕ 1		
⊕ 2		
HDMI 1		
HDMI 2		
HDMI 3 ▶	◀1	DVD
HDMI 4	2	VCR/DVR
PC	3	CBL/SAT
	4	GAME/TV
	5	AUX
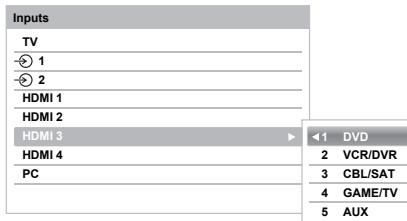
4 Press ▲ / ▼ to select the desired input source, and then press **OK**.

NOTE:
• These functions depend on the device connected. If you select the HDMI CEC Control input source from the popup window, some HDMI CEC Control devices may automatically turn on.
• If the HDMI cable from connected equipment is changed, **Enable** in the HDMI CEC Control Setup menu may need to be reset to **On**.
• If you change the HDMI lead to a connected device or change an HDMI device setting, reset the **Enable HDMI CEC Control** item on the HDMI CEC Control Setup menu from **Off** to **On**.

HDMI CEC Control one touch play

When connected equipment is switched on, HDMI CEC Control will automatically detect the television through the input selection. If the television is in Standby, it will be switched on automatically.

These functions can be enabled or disabled from the **HDMI CEC Control Setup** (see page 80).

NOTE:
• Even if the equipment is showing a menu, the television may automatically show the input source.
• This feature depends on the connected equipment and television state.

HDMI CEC Control system standby

If the television is turned off (Standby), the television will send a message to turn off (Standby) all of the HDMI CEC Control devices connected to the television.

These functions can be enabled or disabled from the **HDMI CEC Control Setup** (see page 80).

NOTE: This feature depends on the connected equipment and television state.

Using MHL TV function

You can use the following functions by connecting between the TV HDMI 3 port and a USB port of mobile phones etc. with an MHL cable.

• Charge with mobile phone from TV
• Two-way remote operation between TV and mobile phone
• Video/Audio output from mobile phone

NOTE: These functions may not be available depending on the connected device.

Connecting an MHL-compatible device

Connect the device to the HDMI 3 port on the TV with an MHL cable (not supplied).
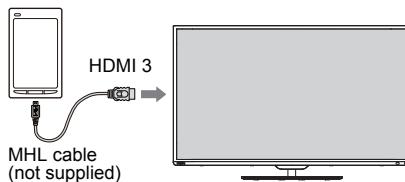
• When you connect an MHL-compatible device to the HDMI 3 port on the TV with the MHL cable, charging starts automatically.

NOTE: Do not connect an MHL-compatible device to any port other than the HDMI 3 port.

Operating an MHL-compatible device

When an MHL-compatible device is connected to the HDMI 3 port on the TV, input automatically switches to the HDMI 3 port.
Operate the device using the remote control for the TV. To display photos, select the photos using ▲▼◄ ► and press **OK**. To play a video, press ► (play).
Depending on the connected MHL-compatible device, it may be possible to perform operations from the device.

MHL Setup

Select whether or not input automatically switches to the HDMI 3 port when an MHL-compatible device is connected.

1 In the **Options** menu, press ▲ / ▼ to select **MHL Setup**.

2 Press ► to select **TV Auto Input Switch**.

3 Press ◄ / ► to select **On** or **Off** and press **OK**.

Text services

This television has a multi-page text memory, which takes a few moments to load. It offers two *Modes* of viewing text – **Auto** will display **Fastext**, if available. **List** will save your four favourite pages.

Selecting modes

The text character set will be automatically chosen by the language setting in the **Options** *menu.*

❶ Press ➤━◖ and ▲ / ▼ to highlight **Options** icon.

❷ Press ▶ and ▲ / ▼ to select **Teletext**, and then press ◀ / ▶ to select **Auto** or **List**.

< Options		
Recording Setup		
Media Player Setup		
MHL Setup		
HDMI CEC Control Setup		
Teletext	Auto ▶	Auto
Panel Lock	Off	List
AV Connection		
Power Management		
Blue Screen	Off	
HDMI Information Display	On	
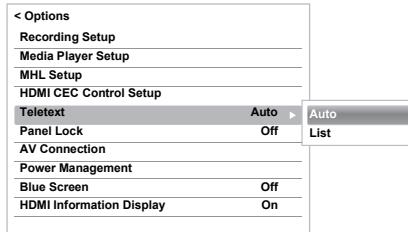
Text information

The TEXT button

To view text services press **TEXT**. Press again to superimpose the text over a normal broadcast picture and again to return to normal viewing. Channels cannot be changed until text is cancelled.

The first text page shown will be the *initial* page.

Any text page can be accessed by entering the 3-digit page number using the numbered buttons, pressing the coloured buttons or pressing **P⌃** to advance to the next page and **P⌄** to go back to the previous page.

Sub-pages

The pages on the screen will dynamically update as sub-pages are received.

If you open a page containing sub-pages, the sub-pages are automatically displayed in sequence. To quit automatic sub-page change, press ◀ / ▶.

Once selected, the sub-page you are viewing will be highlighted and, as the television loads any additional sub-pages, the colour of the numbers will change, indicating that these pages have been loaded.

These sub-pages will remain available to view until another page is chosen or, in normal TV mode, the channel is changed.

Navigating pages using Auto

If **Fastext** is available, four coloured titles will appear at the base of the screen.

To access one of the four given subjects, press the relevant coloured button on the remote control.

For further information on your particular text system(s), see the broadcast text index page or consult your local Toshiba dealer.

Navigating pages using LIST

The four coloured choices at the bottom of the screen are numbers – 100, 101, 102 and 103, which have been programmed into the television's memory. To view these pages, press the relevant coloured buttons.

To change these saved pages, press the relevant coloured button and enter the 3-digit number. This number will change on the top left of the screen and in the coloured highlight.

Press **OK** to save. **Whenever OK is pressed, all four page numbers showing at the bottom will be saved and the previous ones will be lost.**

NOTE: The video signal from the external inputs (EXT-1 and EXT-2) is not saved.

If **OK** is not pressed, the selection will be forgotten when the channel is changed.

Other pages may be viewed by entering the 3-digit page number – but DO NOT press **OK** or these pages will be saved.

Control buttons

Below is a guide to the functions of the remote control text buttons.

☰i To display the index/initial page:

Press ☰i to access the index/initial page. The one displayed is dependent on the broadcaster.

TEXT To display a page of text:

Press **TEXT** to display text. Press again to superimpose text over a normal picture. Press again to return to normal television viewing. Channels cannot be changed until this has been done.

☰? To reveal concealed text:

To discover the solutions on quiz and joke pages press the ☰? button.

☰ To hold a wanted page:

At times it is convenient to hold a page of text. Press ☰ and ☰ will appear in the top left of the screen. The page will be held on screen until the button is pressed again.

☰ To enlarge the text display size:

Press ☰ once to enlarge the top half of the page, press again to enlarge the bottom half of the page. Press again to revert to normal size.

⏱/☰✕ To temporarily erase the text screen:

Press ⏱/☰✕ once to erase the text screen temporarily. To recall the text screen, press the button again.

To display news flashes:
Select the news flash page for the chosen text service (see the index page of text service). The news flashes will be displayed as and when they are broadcast.
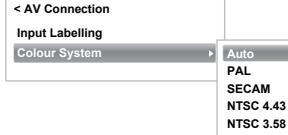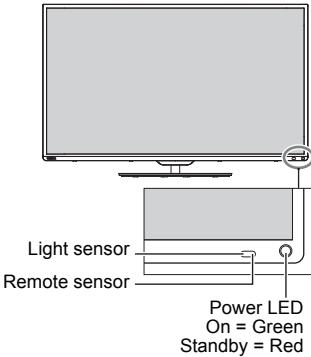
> ● **Remember to cancel text before changing channels - press the TEXT button twice.**

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Questions and Answers

Below are the answers to some of the most common queries.

	Question	Answer
Sound	*Why is there no sound or picture?*	Check the television is not in Standby mode. Check the mains plug and all mains connections.
	Why is there a picture but no sound?	Check all lead connections. No sound or unacceptable format sound may be received. Check the volume has not been turned down or that sound mute has not been selected. Check shared audio settings.
	Why is the soundtrack in English when a different audio language has been selected?	The programme is currently being broadcast with an English soundtrack only.
	Why is there incorrect or no sound when in DTV mode?	Press ◯I/II to ensure the hard of hearing option has not been selected.
Picture	*There is a picture, but why is there little or no colour?*	When using an **external** source, for instance, a poor quality video tape, if there is little or no colour, improvements may sometimes be achieved. The colour is factory set to **Auto** to automatically display the best colour system. *To check that you have the best colour:* **1** With the external source playing, select **Colour System** from the **Options** menu. < AV Connection Input Labelling Colour System ▶ Auto PAL SECAM NTSC 4.43 NTSC 3.58 **2** With ▲ / ▼ choose among **Auto**, **PAL**, **SECAM**, **NTSC 4.43** or **NTSC 3.58**.
	What else can cause a poor picture?	Interference or a weak signal. Try a different television station. **Manual Fine Tuning** may help. **1** Select the **ATV Manual Tuning** menu. Highlight the station and press **OK**. Then press ▶ to select **Manual Fine Tuning**. **2** Using ▲ / ▼ adjust to get the best picture and sound. Press **OK** and then press **EXIT**. ATV Manual Tuning Manual Fine Tuning 1 I A ↔ C 2 🔍 0
	Why doesn't the video/DVD being played show on screen?	Make sure the media recorder or DVD player is connected to the television as shown on page 9, and then select the correct input by pressing ⊕.
	Why are there vertical stripes on the screen when in PC mode?	The **Sampling Clock** may need adjustment. Select **PC Settings** from the **Display Settings** menu, highlight **Sampling Clock** and adjust until the lines clear.

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	Question	Answer
Picture	*Why are there horizontal stripes and/ or blurred images on the screen when in PC mode?*	The **Clock Phase** may need adjustment. Select **PC Settings** from the **Display Settings** menu, highlight **Clock Phase** and adjust until the picture clears.
	Why are the colours wrong when an NTSC source is played?	Connect the source via a SCART lead and play. Select **Colour System** from the **Options** menu. **1** Set the Colour to **Auto** and exit. **2** Go to the **Picture** menu and adjust the tint.
General	*Why don't the controls of the television work?*	Check that **Panel Lock** is not **On**.
	Why doesn't the remote control work?	Check that batteries aren't exhausted or inserted incorrectly.
	Why is the digital channel locked?	The channel has been locked in **Channel Options** (see 'Digital settings – Channel Options' section).
	Why are some of the digital subscription channels unavailable?	Your subscription needs upgrading. Contact your service provider.
	What is DVB-T?	Digital Video Broadcast via an aerial/antenna.
	How are DTV radio channels selected?	Select from All Channel List (**LIST** button).
	What can be done if the PIN number has been forgotten?	Use the Master PIN code of 1276, then change to a number of your choice. Select **Parental PIN Setup** from the **DTV Settings** menu to enter PIN. Ensure that no-one else can use the Master PIN by removing the Owner's Manual.
	Why when digital subtitles have been selected are they not showing on screen?	Subtitles are not currently being transmitted by the broadcaster.
	Why are there problems with analogue text?	Good performance of text depends on a good strong broadcast signal. This normally requires a roof or loft aerial. If the text is unreadable or garbled, check the aerial. Go to the *main index* page of the text service and look for the *User Guide*. This will explain the basic operation of text in some detail. If further information is needed on how to use text *see the text section*.
	Why is a page number visible at the top of the screen but no text?	Text has been selected but Teletext information is currently unavailable on the current source.
	Why don't the devices connected via HDMI operate properly?	Make sure to use cables with the HDMI logo HDMI (see page 10). Some early HDMI equipment may not work properly with the latest HDMI TV products, due to new standard adoption.
	Why don't the devices connected via MHL operate properly?	Turn off your TV and unplug the power cord, and then plug and turn on again. Turn the MHL Source Power Off and On again. Try to reconnect a MHL cable.
	Why don't the HDMI CEC Control devices work?	When the connected HDMI CEC Control device does not work correctly after you have changed the settings of the device, turn off your television and unplug the power cord, and then plug and turn on again. Unplug the HDMI cable of the HDMI CEC Control device and lead again.
	Why is the HDMI CEC logo still showing when the equipment has been disconnected?	If the HDMI CEC Control device is disconnected, the logo will disappear after approximately one minute.

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	Question	Answer
General	*Why don't the networked devices work?*	The LAN cables are not connected properly or at all. Connect all cables (see page 13). Make sure your network address is set up correctly (see page 44).
	Why doesn't the wireless network work?	Check that the AP is powered on.
	Why doesn't the Media Player feature operate?	Make sure that devices are connected correctly. Incorrect behaviour may occur with a USB Hub connection. Check your network setup if using a network media server.
	Why are not 3D images displayed?	Ensure that there is no object blocking the infrared signals in the infrared reception part of television and 3D glasses. If the infrared data communication between the television and 3D glasses is lost for 5 minutes, the power of 3D glasses is turned off.
	Why isn't Skype launched?	Check that the recommended video camera (page 56) is connected to the TV. Ensure the network cable connection (page 13). Check the Network setting of TV. Turn off the TV and unplug the power cord. After 1 minute, plug the power cord in and turn on the TV.
	Why can't the Skype account be signed in?	If you have no Skype Name, create a Skype Name in **Create an account**. If you forgot password, visit www.skype.com and confirm the password.
	What do the LEDs on the front of the television indicate?	Check the table below.

LED indication	Condition
Green	Power ON
Red	Power OFF (Standby or Active Standby)

Light sensor

Remote sensor

Power LED
On = Green
Standby = Red

Other problems

If your TV's problem is not addressed in this Questions and Answers section or the recommended solution has not worked, do one of the following:

1 Turn off your TV. After 30 seconds, turn it on.
2 Turn off the TV and unplug the power cord. After 1 minute, plug the power cord in and turn on the TV.
3 Perform the **Reset TV** function in the **Installation** menu.

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Information

Before connecting any external equipment, turn off all main power switches. If there is no switch, remove the mains plug from the wall socket.

Signal information for Mini D-sub 15 pin connector

Pin No.	Signal name	Pin No.	Signal name	Pin No.	Signal name
1	R	6	Ground	11	NC
2	G	7	Ground	12	DDC Data
3	B	8	Ground	13	H-sync
4	NC*	9	+5V	14	V-sync
5	Ground	10	Ground	15	DDC Clock

* NC = not connected

Acceptable PC signals through the PC terminal

The PC input on this TV only accepts signal formats which are compliant with VESA-DMT as shown in the table below. Since some PCs input signals which are different from the resolution and frequency described in the table below, the following phenomenon may occur; incorrect display, false format detection, picture position failure, blur, or judder. In this case, set the monitor output format on your PC to conform to a signal in the table below.

Format	Resolution	V. Frequency	H. Frequency	Pixel Clock Frequency	VESA Standard (DMT)
VGA	640 × 480	59.940 Hz	31.469 kHz	25.175 MHz	●
		72.809 Hz	37.861 kHz	31.500 MHz	●
		75.000 Hz	37.500 kHz	31.500 MHz	●
SVGA	800 × 600	56.250 Hz	35.156 kHz	36.000 MHz	●
		60.317 Hz	37.879 kHz	40.000 MHz	●
		72.188 Hz	48.077 kHz	50.000 MHz	●
		75.000 Hz	46.875 kHz	49.500 MHz	●
XGA	1024 × 768	60.004 Hz	48.363 kHz	65.000 MHz	●
		70.069 Hz	56.476 kHz	75.000 MHz	●
		75.029 Hz	60.023 kHz	78.750 MHz	●
WXGA	1280 × 768	59.995 Hz	47.396 kHz	68.250 MHz	●
		59.870 Hz	47.776 kHz	79.500 MHz	●
		74.893 Hz	60.289 kHz	102.250 MHz	●
	1280 × 800	59.810 Hz	49.702 kHz	83.500 MHz	
	1360 × 768	60.015 Hz	47.712 kHz	85.500 MHz	●
WXGA+	1440 × 900	59.887 Hz	55.935 kHz	106.500 MHz	
SXGA	1280 × 1024	60.020 Hz	63.981 kHz	108.000 MHz	●
		75.025 Hz	79.976 kHz	135.000 MHz	●
1080p	1920 × 1080p	60.000 Hz	67.500 kHz	148.500 MHz	

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Acceptable video or PC signals through the HDMI terminals

The HDMI inputs on this TV only accept VGA, SVGA, XGA, WXGA, and SXGA signal formats which are compliant with VESA as shown in the table below. Since some PCs and HDMI or DVI devices input signals which are different from the resolution and frequency described in the table below, the following phenomenon may occur: incorrect display, false format detection, picture position failure, blur, or judder.
In this case, set the monitor output format on your PC, HDMI or DVI device to conform to a signal in the table below.

Format	Resolution	V. Frequency	H. Frequency	Pixel Clock Frequency	VESA Standard
480i	720 × 480i	59.940/60.000 Hz	15.734/15.750 kHz	27.000/27.027 MHz	
576i	720 × 576i	50.000 Hz	15.625 kHz	27.000 MHz	
480p	720 × 480p	59.940/60.000 Hz	31.469/31.500 kHz	27.000/27.027 MHz	
576p	720 × 576p	50.000 Hz	31.250 kHz	27.000 MHz	
1080i	1920 × 1080i	59.940/60.000 Hz	33.716/33.750 kHz	74.176/74.250 MHz	
1080i	1920 × 1080i	50.000 Hz	28.125 kHz	74.250 MHz	
720p	1280 × 720p	59.940/60.000 Hz	44.955/45.000 kHz	74.176/74.250 MHz	
720p	1280 × 720p	50.000 Hz	37.500 kHz	74.250 MHz	
1080p	1920 × 1080p	59.940/60.000 Hz	67.433/67.500 kHz	148.352/148.500 MHz	
1080p	1920 × 1080p	50.000 Hz	56.250 kHz	148.500 MHz	
1080p	1920 × 1080p	24.000 Hz	27.000 kHz	74.250 MHz	
1080p	1920 × 1080p	29.970/30.000 Hz	33.720/33.750 kHz	74.176/74.250 MHz	
1080p	1920 × 1080p	25.000 Hz	28.130 kHz	74.250 MHz	
VGA	640 × 480	59.940/60.000 Hz	31.469/31.500 kHz	25.175/25.200 MHz	●
		72.809 Hz	37.861 kHz	31.500 MHz	●
		75.000 Hz	37.500 kHz	31.500 MHz	●
SVGA	800 × 600	56.250 Hz	35.156 kHz	36.000 MHz	●
		60.317 Hz	37.879 kHz	40.000 MHz	●
		72.188 Hz	48.077 kHz	50.000 MHz	●
		75.000 Hz	46.875 kHz	49.500 MHz	●
XGA	1024 × 768	60.004 Hz	48.363 kHz	65.000 MHz	●
		70.069 Hz	56.476 kHz	75.000 MHz	●
		75.029 Hz	60.023 kHz	78.750 MHz	●
WXGA	1280 × 768	59.995 Hz	47.396 kHz	68.250 MHz	●
		59.870 Hz	47.776 kHz	79.500 MHz	●
		74.893 Hz	60.289 kHz	102.250 MHz	●
	1360 × 768	60.015 Hz	47.712 kHz	85.500 MHz	●
SXGA	1280 × 1024	60.020 Hz	63.981 kHz	108.000 MHz	●
		75.025 Hz	79.976 kHz	135.000 MHz	●

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Media Player Supported Format

Media Player	Media Format	File Extension	Video codec	Audio codec	USB	Network	Note
Photo	JPEG	.jpg .jpeg	JPEG	–	yes	yes	**USB** Data compatibility: JPEG Exif ver 2.2 Maximum viewable resolution: •JPEG 15360 × 8640 (Base-line) 1024 × 768 (Progressive) •BMP 9600 × 6400 Maximum number of files: 1000 / folder
	MPO	.mpo	MPO	–	yes	no	
	BMP	.bmp	BMP	–	yes	no	**Network** Data compatibility: JPEG Exif ver 2.2 Maximum viewable resolution: 4096 × 4096 Maximum number of files: 1000/folder **NOTE:** Some files may not be played.
Movie	AVI	.avi	MPEG-2 MPEG-4 part2 H.264 (MPEG-4 AVC) DivX Xvid	MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM ADPCM MPEG-2/4 LC-AAC MPEG-4 HE-AAC	yes	no	**USB** Maximum number of files: 1000 / folder Maximum viewable resolution: • Motion-JPEG:640 × 480 • Other:1920 × 1080 Maximum video size: Unlimited
	MPEG-2 PS	.mpg .mpeg	MPEG-1 Video	MPEG-1/2 Layer3	yes	no	
			MPEG-2 Video	MPEG-1/2 Layer2 Dolby Digital (AC-3) L-PCM	yes	yes	**Network** Maximum video resolution: 1920 × 1080 Maximum number of file:1000 / folder Maximum video size: Unlimited
	MPEG-2 TS	.ts .trp .tp	MPEG-2 Video	MPEG-1/2 Layer2	yes	yes	
			H.264(MPEG-4 AVC) VC-1(WMV9)	MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM MPEG-4 LC-AAC MPEG-4 HE-AAC	yes	no	
	MPEG-2 VOB	.vob	MPEG-1 Video MPEG-2 Video	MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM	yes	no	**NOTE:** Some files may not be played.

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Media Player	Media Format	File Extension	Video codec	Audio codec	USB	Network	Note
Movie	MOV	.mov	H.264 (MPEG-4 AVC) MPEG-4 part2	MPEG-1/2 Layer3 MPEG-2/4 LC-AAC MPEG-4 HE-AAC	yes	no	
	MP4	.mp4 .m4v	H.264 (MPEG-4 AVC) MPEG-4 part12,14	MPEG-1/2 Layer3 MPEG-4 HE-AAC	yes	no	
			H.264 (MPEG-4 AVC)	MPEG-2/4 LC-AAC	yes	yes	
	ASF	.asf .wmv	VC-1 (WMV9)	WMA7/8/9 Std WMA9 Pro	yes	no	
	DivX	.divx .div	DivX 3,4,5,6	MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) PCM ADPCM	yes	no	
	Xvid	.xvid	Xvid				
	MKV	.mkv	MPEG-1 Video MPEG-2 Video MPEG-4 part2 H.264 (MPEG-4 AVC)	MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM MPEG-2/4 LC-AAC MPEG-4 HE-AAC	yes	no	
	Flash Video (FLV1)	.flv .swf	Sorenson H.263 (FLV1) H.264 (MPEG-4 AVC)	MPEG-1/2 Layer3 MPEG-2/4 LC-AAC L-PCM ADPCM	yes	no	
	3GPP	.3gp	MPEG-4 part2 H.264 (MPEG-4 AVC)	MPEG-2/4 LC-AAC	yes	no	
	Motion JPEG	.avi .mp4 .mkv	JPEG	L-PCM ADPCM	yes	no	
Music	MP3	.mp3	–	MPEG-1/2 Layer-3	yes	yes	**USB** Maximum number of files: 1000 / folder Maximum music size: Unlimited
	MP4	.m4a	–	MPEG-2/4 LC-AAC	yes	yes	
	WMA	.wma	–	WMA7/8/ Std	yes	no	
				WMA9 Std	yes	yes	**Network** Sampling rate: 32, 44.1 and 48 KHz Bit rate: 32 to 320 kbps Maximum number of files: 1000 / folder Maximum music size: Unlimited
				WMA9 Pro	yes	no	
	WAV	.wav	–	LPCM ADPCM MPEG-1/2 Layer-3 WMA7/8/9/ Std WMA9 Pro	yes	no	
	LPCM		–		no	yes	
							NOTE: Some files may not be played.

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3D Support Format (HDMI)

Resolution	Aspect ratio	V.Frequency	H.Frequency	Pixel Clock Frequency	3D Structure
720 × 480p	16:9	59.940/60.000 Hz	31.469/31.500 kHz	54.000/54.054 MHz	Side by Side (Full)
				27.000/27.027 MHz	Side by Side (Half)
					Top and Bottom
720 × 576p	16:9	50.000 Hz	31.250 kHz	54.000 MHz	Side by Side (Full)
				27.000 MHz	Side by Side (Half)
					Top and Bottom
1280 × 720p	16:9	59.940/60.000 Hz	90.0/89.91 kHz	148.352/148.500 MHz	Frame Packing
			44.955/45.000 kHz	74.176/74.250 MHz	Side by Side (Half)
					Top and Bottom
		50.000 Hz	75.000 kHz	148.500 MHz	Frame Packing
			37.500 kHz	74.250 MHz	Side by Side (Half)
					Top and Bottom
1920 × 1080i	16:9	59.940/60.000 Hz	33.716/33.750 kHz	74.176/74.250 MHz	Side by Side (Half)
					Top and Bottom
		50.000 Hz	28.130 kHz	74.250 MHz	Side by Side (Half)
					Top and Bottom
1920 × 1080p	16:9	23.976/24.000 Hz	53.940/54.000 kHz	148.352/148.500 MHz	Frame Packing
			26.973 kHz	74.176/74.250 MHz	Side by Side (Half)
					Top and Bottom
		29.970/30.000 Hz	67.433/67.500 kHz	148.352/148.500 MHz	Frame Packing
			33.716/33.750 kHz	74.176/74.250 MHz	Side by Side (Half)
					Top and Bottom
		50.000 Hz	56.250 kHz	148.500 MHz	Side by Side (Half)
					Top and Bottom
		59.940/60.000 Hz	67.433/67.500 kHz	148.352/148.500 MHz	Side by Side (Half)
					Top and Bottom

• The 3D function and 2D to 3D conversion function does not support all content depending on its input source format.

3D Support Format (DTV)

Video Format	Aspect ratio	V.Fraquency	3D Structure
480i, 480p	16:9	59.940/60.000 Hz	Side by Side (Half)
			Top and Bottom
576i, 576p	16:9	50.000 Hz	Side by Side (Half)
			Top and Bottom
720p	16:9	59.940/60.000 Hz	Side by Side (Half)
			Top and Bottom
		50.000 Hz	Side by Side (Half)
			Top and Bottom
1080i	16:9	59.940/60.000 Hz	Side by Side (Half)
			Top and Bottom
		50.000 Hz	Side by Side (Half)
			Top and Bottom
1080p	16:9	24.000 Hz	Side by Side (Half)
			Top and Bottom
		30.000 Hz	Side by Side (Half)
			Top and Bottom
		50.000 Hz	Side by Side (Half)
			Top and Bottom
		59.940/60.000 Hz	Side by Side (Half)
			Top and Bottom

* Side by Side (Full) is composed of left and right stereoscopic pictures that each size is equal to 2D.

Side by Side (Full)

2D Video   3D Video

Side by Side (Half)

2D Video   3D Video

• The 3D function and 2D to 3D conversion function does not support all content depending on its input source format.

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PARENTAL GUIDANCE CODES (Normative)
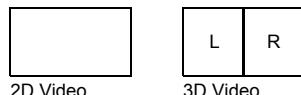
Recommended On-Screen-Display for parental guidance codes transmitted within DVB-SI EIT information using the DVB parental_rating_descriptor.

			Receiver Menu Set-up and Suggested OSD wording for Setting Blocking (Restriction of access)							
			Block all	Block G and above (optional)	Block PG and above	Block M and above	Block MA and above	Block AV and above	Block R and above	None
Transmitted rating hex code	Australian parental guide code	On Screen Display	Resultant receiver action to received hex code ✓ is show programme - ✕ is block until PIN entered							
0 × 00	Not Classified	–	✕	✓	✓	✓	✓	✓	✓	✓
0 × 01		–	✕	✓	✓	✓	✓	✓	✓	✓
0 × 02	**P** Pre school	**P**	✕	✓	✓	✓	✓	✓	✓	✓
0 × 03		P	✕	✓	✓	✓	✓	✓	✓	✓
0 × 04	**C** Children's	**C**	✕	✓	✓	✓	✓	✓	✓	✓
0 × 05		C	✕	✓	✓	✓	✓	✓	✓	✓
0 × 06	**G** General	**G**	✕	✕	✓	✓	✓	✓	✓	✓
0 × 07		G	✕	✕	✓	✓	✓	✓	✓	✓
0 × 08	**PG** Parental Guidance Recommended	**PG**	✕	✕	✕	✓	✓	✓	✓	✓
0 × 09		PG	✕	✕	✕	✓	✓	✓	✓	✓
0 × 0A	**M** Mature Audience 15+	**M**	✕	✕	✕	✕	✓	✓	✓	✓
0 × 0B		M	✕	✕	✕	✕	✓	✓	✓	✓
0 × 0C	**MA** Mature Adult Audience 15+	**MA 15+**	✕	✕	✕	✕	✕	✓	✓	✓
0 × 0D		MA 15+	✕	✕	✕	✕	✕	✓	✓	✓
0 × 0E	**AV** Adult Audience, Strong violence 15+	**AV 15+**	✕	✕	✕	✕	✕	✕	✓	✓
0 × 0F	**R** Restricted 18+	**R**	✕	✕	✕	✕	✕	✕	✕	✓

Bandwidth

7 MHz Channel Frequencies
BAND III

Australian 7 MHz Designated Channel Number	7 MHz Channel Frequency Limits (MHz)	7 MHz Digital Channel Centre Freq (MHz)
6	174-181	177.5
7	181-188	184.5
8	188-195	191.5
9	195-202	198.5
9A	202-209	205.5
10	209-216	212.5
11	216-223	219.5
12	223-230	226.5

BAND III

Australian 7 MHz Designated Channel Number	7 MHz Channel Frequency Limits (MHz)	7 MHz Digital Channel Centre Freq (MHz)
27	519-526	522.5
28	526-533	529.5
29	533-540	536.5
30	540-547	543.5
31	547-554	550.5
32	554-561	557.5
33	561-568	564.5
34	568-575	571.5
35	575-582	578.5
36	582-589	585.5
37	589-596	592.5
38	596-603	599.5
39	603-610	606.5
40	610-617	613.5
41	617-624	620.5
42	624-631	627.5
43	631-638	634.5
44	638-645	641.5
45	645-652	648.5
46	652-659	655.5
47	659-666	662.5
48	666-673	669.5
49	673-680	676.5
50	680-687	683.5
51	687-694	690.5
52	694-701	697.5
53	701-708	704.5
54	708-715	711.5
55	715-722	718.5
56	722-729	725.5

Australian 7 MHz Designated Channel Number	7 MHz Channel Frequency Limits (MHz)	7 MHz Digital Channel Centre Freq (MHz)
57	729-736	732.5
58	736-743	739.5
59	743-750	746.5
60	750-757	753.5
61	757-764	760.5
62	764-771	767.5
63	771-778	774.5
64	778-785	781.5
65	785-792	788.5
66	792-799	795.5
67	799-806	802.5
68	806-813	809.5
69	813-820	816.5

FREEVIEW™ Australia Digital TV Receiver Specification
Phase 2- V 1.0

Signal Class Table

C mode

OSD	RF Frequency [MHz]
C2	48.25
C3	55.25
C4	62.25
C5	175.25
C6	182.25
C7	189.25
C8	196.25
C9	203.25
C10	210.25
C11	217.25
C12	224.25
C21	471.25
C22	479.25
C23	487.25
C24	495.25
C25	503.25
C26	511.25
C27	519.25
C28	527.25
C29	535.25
C30	543.25
C31	551.25
C32	559.25
C33	567.25
C34	575.25
C35	583.25
C36	591.25
C37	599.25
C38	607.25
C39	615.25
C40	623.25
C41	631.25
C42	639.25
C43	647.25
C44	655.25
C45	663.25
C46	671.25
C47	679.25
C48	687.25
C49	695.25
C50	703.25
C51	711.25
C52	719.25
C53	727.25
C54	735.25

OSD	RF Frequency [MHz]
C55	743.25
C56	751.25
C57	759.25
C58	767.25
C59	775.25
C60	783.25
C61	791.25
C62	799.25
C63	807.25
C64	815.25
C65	823.25
C66	831.25
C67	839.25
C68	847.25
C69	855.25

S mode

OSD	RF Frequency [MHz]
S1	105.25
S2	112.25
S3	119.25
S4	126.25
S5	133.25
S6	140.25
S7	147.25
S8	154.25
S9	161.25
S10	168.25
S11	231.25
S12	238.25
S13	245.25
S14	252.25
S15	259.25
S16	266.25
S17	273.25
S18	280.25
S19	287.25
S20	294.25
S21	303.25
S22	311.25
S23	319.25
S24	327.25
S25	335.25
S26	343.25
S27	351.25

OSD	RF Frequency [MHz]
S28	359.25
S29	367.25
S30	375.25
S31	383.25
S32	391.25
S33	399.25
S34	407.25
S35	415.25
S36	423.25
S37	431.25
S38	439.25
S39	447.25
S40	455.25
S41	463.25
S51	69.25
S52	76.25
S53	83.25
S54	90.25
S55	97.25

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There will be a charge to cover the costs of providing the source code.

Cleaning the screen and cabinet…

*Turn off the power, and clean the screen and cabinet with a soft, dry cloth. We recommend that you **do not** use any proprietary polishes or solvents on the screen or cabinet as this may cause damage.*

Cautions and other information for 3D

Important information for 3D viewing

Available 3D glasses :

Toshiba FPT-AG03 (supplied)

CAUTION

• **This product contains a coin/button cell battery. Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.**

• **The 3D function has been designed for private use and entertainment in your home environment. Please note that any commercial use of the 3D function could lead to copyright infringement of authors' rights. Toshiba asks you to respect the intellectual property rights of third parties.**

About handling the 3D glasses

• **Do not leave the 3D glasses or the accessories within the reach of small children.**
Inhaling or swallowing them may cause suffocation or lesions in the stomach wall.
If swallowed, consult a doctor immediately.

• **Do not repair, modify, or disassemble the 3D glasses by yourself.**
Doing so may cause a fire or cause you to become indisposed while viewing 3D images.
Contact the Toshiba Call Center for repair of your 3D glasses.

• **Do not expose the glasses to excessive heat such as sunshine, fire, or the like.**

About the 3D glasses

• **Do not use the 3D glasses if they are not working properly or broken.**
Continuing to use them in such a state may cause injury, eye strain, or indisposition.
Do not use the 3D glasses if they are broken or have any cracks.

• **Do not stand or walk while wearing 3D glasses.**
You may lose your balance which could result in falls or other accidents.

• **Do not wear the 3D glasses for any purpose other than viewing 3D programming.**
3D glasses do not function as sunglasses.

• **Do not drop, exert pressure on, or step on the 3D glasses.**
Doing so may damage the glass section, which may result in injury.
Exposing the 3D glasses to liquid or excessive heat may damage the liquid crystal shutter function.

• **If your nose or temple turns red, or you feel pain or discomfort, stop using the 3D glasses.**
Such symptoms as above may occur if you keep wearing them for a long time, which may also cause indisposition.

• **Be careful not to pinch your fingers in the hinge of the 3D glasses.**

Cautions on watching 3D images

• **Some viewers may experience a seizure or blackout when exposed to certain flashing images or lights contained in certain 3D television pictures or video games.**
Anyone who has had a seizure, loss of awareness, or other symptoms linked to an epileptic condition, or has a family history of epilepsy, should contact a health care provider before using the 3D function.

• **Avoid use of the 3D function when under the influence of alcohol.**

• **If you are ill or feel ill, you should refrain from viewing 3D images, and consult your health care provider as may be appropriate.**

• **If you experience any of the following symptoms when viewing 3D video images, stop viewing and contact your health care provider:**
Convulsions, eye or muscle twitching, loss of awareness, altered vision, involuntary movements, disorientation, eye strain, nausea/vomiting, dizziness, headaches.

• **If you feel eye fatigue or other discomfort from viewing 3D video images, remove the 3D glasses and discontinue use until the condition is eliminated.**

• **Viewing in 3D may cause dizziness and/or disorientation for some viewers.**
Therefore, to avoid injury do not place your TV near open stairwells, balconies, or wires.
Also do not sit near objects that could be broken if accidentally hit.

• **When viewing 3D images, always wear 3D glasses.**
Watching 3D images without 3D glasses may cause eye strain.
Use specified 3D glasses.

• **When watching 3D images, do not wear 3D glasses at an angle and do not lie down.**
If you watch while lying down or with the glasses tilted, the 3D effect is lost and it may cause eye strain.

• **If you have prescription eye glasses or contact lenses, wear the 3D glasses over them.**
Watching 3D images without appropriate eyewear may cause eye strain.

• **If 3D images often appear in double or if you cannot see the images in 3D, stop viewing.**
Continuous viewing may cause eye strain.

• **Due to the possible impact on vision development, viewers of 3D video images should be age 6 or above.**
Children and teenagers may be more susceptible to health issues associated with viewing in 3D and should be closely supervised to avoid prolonged viewing without rest.

• **Watching TV while sitting too close to the screen for an extended period of time may cause eye strain.**
The ideal viewing distance should be at least three times the screen height.

• **Switching left and right images**
The left and right eye shutter timing of the glasses can be swapped. If 3D images look blurred, switch the left and right sides of the 3D image.

If the 3D PIN number has been forgotten:

Use the Master PIN code of 1276, and then change to a number of your choice. Select **3D PIN** from the **3D Setup** menu to enter PIN.

Notes on handling the 3D glasses' liquid crystal shutter lenses
- Do not put excessive force on the lenses.
- Do not scratch the surface of the lenses with sharp objects.
- Do not drop or bend the 3D glasses.

Notes on IR communication
- Do not block the IR sensor for 3D glasses on the TV by placing objects in front of it.
- Do not cover the IR sensor on the 3D glasses with stickers or labels.
- Keep the IR sensor on the 3D glasses clean.
- The use of 3D glasses could interfere with other IR communication devices. Other IR communication devices may cause the 3D glasses not to work correctly. Use the TV and 3D glasses in a place where they will not interfere with other devices or products.

Notes on watching the TV
- 3D effect and image quality may vary depending upon content quality and display device capability/functionality/settings.
- If you use any device, such as a mobile phone or mobile wireless device, near the 3D glasses, the 3D glasses may not work correctly.
- Use the product in the following temperature range; otherwise, the quality of the 3D image or the reliability of the product cannot be guaranteed.
  – 3D glasses: 0 °C - 40 °C (32 °F - 104 °F)
  – TV: 0 °C - 35 °C (32 °F - 95 °F)

- If you use a fluorescent light, it may flicker depending on the frequency of the light. In this case, reduce the brightness of the fluorescent light, or use another light. (It is not recommended to watch the TV in a dark room, especially for children.)
- Wear the 3D glasses properly, otherwise you may not see the correct 3D image.
- When not viewing 3D images on this unit, take off the 3D glasses; otherwise, it may be difficult to see the display on other products such as PC, digital clock or calculator, etc.
- The 2D to 3D conversion function is activated and controlled by you according to your personal preferences.
- The 2D to 3D conversion function is meant for enjoyment of 2D home video, and other 2D content you create, in 3D according to your personal preferences.
- The 2D to 3D conversion function is not intended for use with pre-recorded 2D copyrighted content owned by a third-party unless the copyright owner has given direct or indirect permission, or unless applicable law permits such use.

About the connecting cable
- Use a high-speed and high-quality HDMI cable when you connect a device such as 3D compatible BD player or PC to the TV. When you use a standard HDMI cable, 3D images may not be shown.

Specifications and accessories

Receiving systems

DVB-T Broadcast systems

Frequency	51~858 MHz
Loop Through	51~858 MHz
Bandwidth	7, 8 MHz

Broadcast systems/channels

PAL	I	(UK)	UHF	21 - 69
PAL	B/G	(CCIR)	VHF	2 - 12
			UHF	21 - 69
			CATV	X - Z+2, S1 - S41
PAL	D/K	(CHINA)	VHF	1 - 12
			UHF	13 - 56
			CATV	Z1 - Z38
SECAM	B/G	(CCIR)	VHF	2 - 12
			UHF	21 - 69
			CATV	X - Z+2, S1 - S41
SECAM	D/K	(OIRT)	VHF	1 - 12
			UHF	21 - 69
			CATV	X1 - X19
SECAM L	L	(FRANCE)	VHF	F1-F10, B-Q
			UHF	F21-F69

Video Input   PAL, SECAM, NTSC 3.58/4.43

External connections

EXT 1	Input/Output	21-pin SCART	RGB, A/V input AV out, TV out
EXT 2	Input	RCA jacks RCA jack	Y, P_B/C_B, P_R/C_R Video (Y is shared)
		RCA jacks	Audio L + R (shared)
HDMI 1/2/3/4	Input	HDMI® compliant HDCP compliant HDMI 3 is compatible with MHL	
PC	Input	Mini D-sub 15-pin Analogue	
Digital Audio Output (S/PDIF)		Optical	
LAN port		RJ-45	
USB 1/USB 2 port		Media Player Interface version: USB 2.0 USB class: Mass Storage File system: FAT16 and FAT32	
Headphone socket		3.5 mm stereo	
Stereo		A2, Nicam 2 carrier system	

Visible Screen Size (approx.)	50	126 cm
	58	146 cm
Screen resolution (H × V pixels)	50	1920 × 1080
	58	1920 × 1080
Display	16:9	
Sound output (at 10 % distortion)	Main:	10 W + 10 W

Power consumption (approx.)	50	154 W
	58	184 W
Standby power consumption (approx.)	0.3 W	

Dimensions (approx.)	50	74.0 cm (H) 113.0 cm (W) 23.3 cm (D)
	58	85.1 cm (H) 130.6 cm (W) 33.4 cm (D)
	(Height dimension includes foot stand)	
Weight (approx.)	50	20.0 kg
	58	29.0 kg
Operating condition	Temperature 5 °C - 35 °C (41 °F - 94 °F) Humidity 20 - 80 % (non-condensing)	

Wireless connection
- Standard: IEEE 802.11a/b/g/n
- Frequency Range: 5.15-5.35 GHz, 5.47-5.725 GHz, 5.725-5.850 GHz, 2.400-2.4835 GHz
- Security: WEP64/128, TKIP, AES, WPA/WPA2-PSK, WPS, None

Supplied accessories
- Toshiba 3D glasses : FPT-AG03 : (1pcs)
- Remote control CT-90430 2 batteries (AAA, IEC R03 1.5 V)
- Screw (for TV mounting) See page 6.
- Scart/RCA adaptor

Optional accessories
- USB HDD : HDTC610EK3B1, HDTC610EL3B1, HDTC610EW3B1
- Skype camera : TALK-7291
- Toshiba 3D glasses : FPT-AG03

Specification is subject to change without notice.

TOSHIBA CORPORATION